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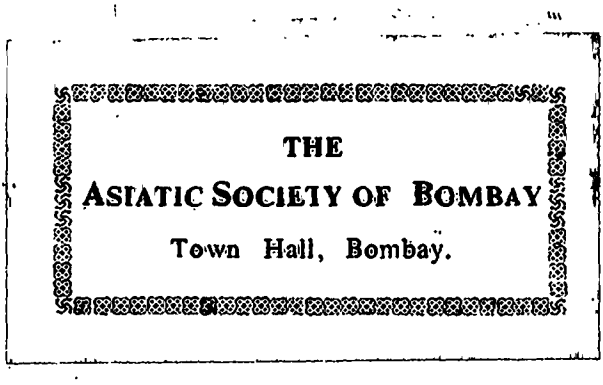

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A CHRONOLOGICAL HISTORY

OF

VOYAGES INTO THE ARCTIC REGIONS;

UNDERTAKEN CHIEFLY FOR THE PURPOSE OF

DISCOVERING A NORTH-EAST, NORTH-WEST,

OR

POLAR PASSAGE

BETWEEN THE

ATLANTIC AND PACIFIC:

FROM THE EARLIEST PERIODS OF SCANDINAVIAN NAVIGATION, TO THE DEPARTURE OF THE

RECENT EXPEDITIONS,

UNDER THE ORDERS OF

CAPTAINS ROSS AND BUCHAN.

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"How shall I admire your heroicke courage, ye marine worthies, beyond all names of worthiness! that neyther dread so long eyther presence or absence of the sunne; nor those foggy mysts, tempestuous winds, cold blasts, snowes and hayle in the ayre: nor the unequall seas, which might amaze the hearer, and amate the beholder, where the *Tritons* and *Neptune*'s selfe would quake with chilling feare, to behold such monstrous icie ilands, renting themselves with terrour of their owne massines, and disdayning otherwise both the sea's sovereigntie, and the sunne's hottest violence, mustering themselves in those watery plaines where they hold a continual civill warre, and rushing one upon another, make windes and waves give backe; seeming to rent the eares of others, while they rent themselves with crashing and splitting their congealed armours."—*Purchas.*

By JOHN BARROW, F. R. S.

W. d. 25

LONDON:

JOHN MURRAY, ALBEMARLE STREET.

1818.

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THE two expeditions recently fitted out for exploring a northern communication between the Atlantic and Pacific oceans were of a nature to excite public attention and to engage a large share of general conversation. But as many crude and absurd notions seemed to be entertained on the subject, it was thought that a brief history, arranged in chronological order, of the dangers and difficulties and progressive discoveries of former attempts, might serve as a proper introduction to the narratives of the present voyages, which, whether successful or not, will be expected by the public.

In the compilation of this brief history no pretensions are set up to authorship—the collecting of the materials, though widely scattered through many large and some few scarce volumes, employed no great share either of the writer's time or research; in their present form they may be the means of saving both to those who feel disposed to acquire a general knowledge of what has been and what yet remains to be accomplished.

London, 1*st August*, 1818.

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APPENDIX.

No. I.

Mr. Buchan's Expedition into the Interior of Newfoundland.

SINCE the first establishment of the fishery on the banks of Newfoundland, very little communication has at any time been had with the natives of this large island, and for more than half a century past none at all; indeed, it was considered by many as doubtful whether there were on the island any permanent inhabitants, or whether the Indians, sometimes seen on the western coast, did not come in their canoes across the Strait of Bellisle merely for the purpose of fishing and killing deer. A settler, however, reported that, in the autumn of 1810, he had discovered a storehouse on the banks of the River of Exploits. Upon this report, Sir John Duckworth sent Lieutenant (now Captain) BUCHAN, commander of the schooner *Adonis*, to the Bay of Exploits for the purpose of undertaking an expedition into the interior, with a view of opening a communication with the native Indians, if any such were to be found. His vessel was soon frozen up in the bay; and on the 12th January, 1811, Mr. Buchan began his march into the interior, along the banks of the river, accompanied by twenty-four of his crew and three guides; and, having penetrated about one hundred and thirty miles, discovered some wigwams of the natives. He surprised them; and their inhabitants, in number about seventy-five persons, became

in his power. He succeeded in overcoming their extreme terror, and soon established a good understanding with them. Four of the men, among whom was their chief, accepted his invitation to accompany them back to the place where, as he explained to them by signs, he had left some presents which he designed for them.

The confidence by this time existing was mutual, and so great, that two of Mr. Buchan's people requested to remain with the Indians till his return with the presents. They were permitted to do so; and Mr. Buchan set out on his return to his depôt, with the remainder of the party and the four Indians. They continued together for about six miles, (to the resting place of the night before,) when the chief declined going any farther, and with one of his men took leave, directing the other two to go on with Mr. Buchan. They did so till they came near the place to which they were to be conducted, when one of them became panic-struck, and fled. But the tempers of the two men were different. The latter remained unshaken in his determination, and with a cheerful countenance and an air of perfect confidence in the good faith of his new allies, motioned to them with his hand to proceed; disregarding his companion, and seeming to treat with scorn Mr. Buchan's invitation, to depart freely if he chose to do so. Soon afterwards the party reached their rendezvous; slept there one night; loaded themselves with the presents, and returned again to the wigwams. The behaviour of the Indian remained always the same. He continued to shew a generous confidence, and the whole tenor of his conduct was such as Mr. Buchan could not witness without a feeling of esteem for him. On arriving at the wigwams they were found deserted, and the Indian became exceedingly alarmed. Many circumstances determined Mr. Buchan to let him be at perfect liberty; and this treatment revived his spirits. The party spent the night at the wigwams, and continued their route in the morning. They had proceeded about a mile,

when, being a little in advance before the rest of the party, the Indian was seen to start suddenly backward. He screamed loudly, and fled with a swiftness that rendered pursuit in vain. The cause of his flight was understood when Mr. Buchan, the next moment, beheld upon the ice, headless and pierced by the arrows of the natives, the naked bodies of his two marines who had been left with the Indians. An alarm had, it is evident, been given by the savage to the party at the rendezvous; and it is supposed that, to justify his conduct in so deserting, he had abused his countrymen with a tale, which excited them to what perhaps they considered a just retaliation.

The following is an abstract of Mr. Buchan's journal:—

JOURNAL.

Saturday, 12th January, 1811: River of Exploits.—On the eve of this day my arrangements were closed, and every necessary preparation for the purpose of endeavouring to accomplish the object of procuring an interview with the native Indians of this island. For this service I employed William Cull and Matthew Hughster as guides, attended by twenty-three men and a boy of the crew of His Majesty's schooner, and Thomas Taylor, a man in Mr. Miller's employ, and well acquainted with this part of the country.

The provisions, arms, and other requisite articles, together with presents for the Indians, were packed on twelve sledges, and consisted of the following: viz. bread, eight hundred and fifty pounds; sugar, one hundred pounds; cocoa, thirty-four pounds; pork, six hundred and sixty pounds; salt beef, thirty pounds; spirits, sixty gallons, equal to four hundred and eighty pounds; rice, thirty pounds; tea, six pounds; tare of casks and packages, five hundred pounds; ships' muskets, seven; fowling-pieces, three; pistols, six; cutlasses, six; with cartouch boxes and ammunition equal to two hundred and seventy pounds; ten axes, and culinary utensils: presents for the Indians—blankets, thirty; wool-

len wrappers, nine; flannel shirts, eighteen; hatchets, twenty-six; tin pots, ten; with beads, thread, knives, needles, and other trifles, equal to one hundred and eighty pounds: the sledges with their lashings and drag-ropes are estimated at two hundred and forty pounds; one lower studding sail and painted canvass covers for the sledges, one hundred and twenty pounds; spare snow shoes, buskins, vamps, cuffs, and twenty-eight knapsacks, eighty pounds: making, independent of a small quantity of baggage allowed to each person, three thousand six hundred and twenty pounds in wieght.

13th. Wind N.W. blowing strong. At 7 A. M. commenced our march in crossing the arm from the schooner to Little Peter's Point, which is two miles; we found it extremely cold, with the snow drifting, and sledges heavy from the sloppiness of the ice; but having rounded the point, we became sheltered from the wind until reaching Wigwam Point, which is two miles farther up on the north side; here the river turns to the northward; a mile farther up is Mr. Miller's upper Salmon station; the winter crew have their house on the south shore. 3 P.M. having reached the remains of a house occupied by William Cull last winter, we put up for the night, our distance made good being but eight miles in as many hours travelling. The night proved so intensely cold, with light snow at times, that none of our party could refresh themselves with sleep.

14th. Wind N.W. with sharp piercing cold. Renewed our journey with the dawn, not sorry to leave a place in which we had passed so intolerable a night. Having proceeded two miles, we came to the Nutt Islands, four in number, situated in the middle of the river; a mile above these, occurs the first rattle or small waterfall; as far as the eye could discern up the river, nothing appeared but ice, in rugged ridges, threatening to preclude the possibility of drawing the sledges along; but determined to surmount all practicable difficulties, I proceeded on with the guides to

select among the hollows those which seemed to be the most favourable. At 3 P.M. we put up on the north side, and fenced round the fire-place by way of shelter. This day's laborious journey I compute to be seven miles; the crew, from excessive fatigue, and a somewhat milder night than the last, enjoyed some sleep:—Left a cask with bread, pork, cocoa and sugar, for two days, to be used on our return.

15th. Blowing fresh from W.N.W. to N.N.W. with snow at times; the river winding from west to north-west. At 3 P.M. stopped on the north bank for the night, one mile above a rattling brook, which empties itself into the great river. On the south side we discovered a canoe, which I observed to be one belonging to the Canadian who had resided at Wigwam Point. This day's journey exhibited the same difficulties as yesterday, having frequently to advance a party to cut and level, in some degree, the ridges of ice, to admit the sledges to pass from one gulph to another, and to fill up the hollows, to prevent them from being precipitated so violently as to be dashed to pieces,—but notwithstanding the utmost care, the lashings, from the constant friction, frequently gave way; and in the evening, most of the sledges had to undergo some repair and fresh packing. Fenced the fire-place in; at supper the people appeared in good spirits, the weather being milder; and fatigue produced a tolerable night's rest. This day's distance may be estimated at seven miles.

16th. Strong breezes from the N.W. with sharp frost. Began our journey with the day; several of the sledges gave way, which delayed us a considerable time. At 11 A.M. discovered two old wigwams on the north bank of the river; although they did not appear to have been lately inhabited, yet there were some indications of the natives having been here this fall. 2*h*. 30′ P.M. having reached the lower extremity of the great waterfall, we put up on the north side. While the party were preparing a fire and fence, I

proceeded on, with Cull and Taylor, in search of an Indian path, through which they convey their canoes into the river above the overfall. Taylor, not having been here for many years, had lost all recollection where to find it; however, after a tedious search we fell in with it, and perceived evident signs of their having recently passed this way, but not apparently in any great number. The evening advancing, we retraced our steps, and reached our fire-place with the close of the day. The night proved more mild than any hitherto, and our rest proportionably better. Here I left bread, pork, cocoa and sugar, for two days, and four gallons of rum.

17th. South-westerly winds, with sleet and cold weather. Began this day's route by conducting the sledges in a winding direction amongst some high rocks, which forms the lower part of the waterfall;—we had not proceeded more than half a mile, before it was found necessary to unload and parbuckle the casks over a perpendicular neck of land, which, projecting into the rapid, prevented the ice attaching itself to its verge; having reloaded on the opposite side, and turned the Margin of Coves for the third of a mile, we arrived at the foot of a steep bank where commenced the Indian path; here it was also necessary to unload. Leaving the party to convey the things up the bank, I went on with Cull and Taylor, to discover the farther end of the path; having come to a marsh, it was with difficulty we again traced it; at length we reached the river above the overfall, its whole extent being one mile and a quarter,—having gone on two miles beyond this, we returned. At noon, the wind having veered to the south-east, it came on to rain heavily, sent a division on to the farther end of the path to prepare a fire, &c. At 3 P.M. all the light baggage and arms being conveyed to the fire-place, the sledges were left for the night half-way in the path, so that after eight hours' fatigue, we had got little better than a mile and a half. It continued to rain hard until 9 P.M.

when the wind having shifted round to the westward, the weather cleared up; and the crew, having dried their clothes, retired to rest.

18th. Wind W.N.W. and cold weather. Leaving the party to bring on the sledges to the Indian dock, and to repack them, I and the guides having advanced a mile, it was found requisite to cut a path of a hundred yards to pass over the point which the sledges could not round for want of sufficient ice being attached to it. 10 *h.* 30′ we now rounded a bay, leaving several islands on our left, the travelling pretty good, except in some places where the ice was very narrow, and the water oozing over its surface: most of us got wet feet. 2 *h.* 30′ P.M. put up in a cove on the north shore, as we should have been unable to have reached before dark another place where good fire-wood was to be found; here the river forms a bay on either side, leaving between them a space of nearly one mile and a half, in which were several islands.

Having given directions for the fire-place to be fenced in, and the sledges requiring to be repaired, Cull and myself went on two miles to Rushy Pond Marsh, where he had been last winter, and found that the two wigwams were removed which he then saw here. The trees leading from the river to the marsh were marked, and in some places a fence-work thrown up; the bushes in a particular line of direction, through a long extent of marsh, had wisps of birch bark suspended to them by salmon twine, so placed as to direct the deer down to the river; we killed two partridges, and retired to the party by an inland route: we reckon the distance from the Indian dock to this resting-place to be six miles.

19th. Westerly wind and moderate, but very cold. Most of this day's travelling over smooth snow, the sledges consequently hauled heavy; having winded for two miles amongst rough ice to gain a green wood on the south shore, that on the north being entirely burnt down, we put up at 4 P.M.

a little way in on the bank of a brook, where we deposited a cask with bread, pork, cocoa and sugar for two days' consumption. In all this day's route the river was entirely frozen over: we passed several islands; saw a fox and killed a partridge; estimated distance ten miles; rested tolerably during the night.

20th. Wind W.N.W. and cold. Renewed our journey with the first appearance of day; broke two of the sledges by passing over a mile of sharp ice. At noon the sun shone forth; the weather warm, and a fine clear sky. 4 P.M. halted on an island situate two miles above Badger Bay Brook, which falls into the Exploits, on the north side, and saw the remains of a wigwam; from this brook upwards, as also on the opposite side of the river, are fences for several miles, and one likewise extended, in a westerly direction, through the island on which we halted, and is calculated to be twelve miles from the last sleeping place, and twenty-seven miles from the Indian dock. Hodge's Hills bearing from this E.S.E.

21st. Wind westerly, with bleak weather. At dawn proceeded on; at noon several difficulties presented themselves in crossing a tract of shelvy ice, intersected with deep wide rents, occasioned by a waterfall; the sledges were however got over them, as also some steeps on the north bank. Having ascended the waterfall, found the river open, and faced with ice sufficient on the edge of its banks to admit the sledges. At 3 *h.* 30′ put up for the night, and fenced in the fire-place; this day's distance is estimated at eleven miles, allowing seven from the island on which we slept to the overfall, and from thence four more to this. From the waterfall upwards, on either side of the river where the natural bank would have been inefficient, fences were thrown up, to prevent the deer from landing, after taking to the water by gaps left open for the purpose. Repacked the sledges, two of them being unfit to go on

further, deposited a cask with bread, pork, cocoa and sugar for two days' consumption. The party slept well.

22d. Wind S.W. with mild hazy weather. Having advanced two miles, on the south side stood a storehouse; William Cull stated that no such building was there last year; it appeared newly erected, and its form circular, and covered round with some deer skins, and some carcasses left a little way from it; two poles were stuck in the ice close to the water, as if canoes had lately been there. Four miles from this passed an island and rounded a bay, two miles beyond its western extremity,—on a projecting rock were placed several stag's horns: William Cull now informed me it was at this place he had examined the storehouses mentioned in his narrative, but now no vestige of them appeared; there was, however, ample room cleared of wood for such a building as is described to have stood, and a few hundred yards off was the frame of a wigwam still standing; close to this was a deer-skin hanging to a tree, and farther on a trope with the name of "Rousell." On the south bank, a little lower down, also stood the remains of a wigwam, close to which Cull pointed out the other storehouse to have been; a quarter of a mile below, on the same side, a river, considerable in appearance, emptied itself into this; directly against its entrance stands an island, well wooded: we continued on four miles, and then the party stopped for the night; Cull accompanied me two miles farther, and returned at sun set. During this day's journey, at intervals, we could discern a track which bore the appearance of a man's foot going upwards. One of the sledges fell into the water, but it fortunately happening to be a shoal part nothing was lost. Our distance made good to-day we allow to be twelve miles, and the river open from the last overfall with scarcely enough ice attached to the bank to admit the sledges to pass on, and there are banks and fences in such places as the natives find it necessary to obstruct the landing of the deer, some of these extending

two or three miles, others striking inland. Divided the party into three watches, those on guard under arms during the night.

23d. Wind westerly, wild cold weather. At day-light renewed our journey: the river now shoaled and ran rapidly; I wished to have forded it, conceiving that the Indians inhabited the other side, but found it impracticable. At 10 A.M. having advanced six miles, and seeing the impossibility of proceeding farther with the sledges, I divided the party, leaving one-half to take care of the stores, whilst the other accompanied me; and taking with us four days' provisions, we renewed our route; the river now winded more northerly. Having proceeded on about four miles, we observed on the south side a path in the snow, where a canoe had evidently been hauled across to get above a rattle, this being the only sure indication we had discovered of their having passed upwards from the store on the south side.—The river narrowed, ran irregularly, and diminished in depth very considerably. Having passed several small rivers on this side, we came abreast of an island, opposite to which, on the south side, there was a path in the snow from the water, ascending a bank where the trees were very recently cut, clearly evincing the residence of the natives to be at no great distance; but it being impossible to ford the river at this place, we continued on, but had not gone more than a mile, when, on turning a point, an expansive view opened out, and we saw before us an immense lake extending in a N.E. and S.W. direction, its surface a smooth sheet of ice. We perceived tracks, but could not be certain whether of deer or men. On approaching the lake or pond, we discovered on its north-west side two objects in motion, but were uncertain whether they were men or quadrupeds. I drew the party suddenly into the wood to prevent discovery, and directing them to prepare a place for the night, I went on with Cull to reconnoitre. Having skirted along the woods for nearly two miles, we posted ourselves in a position to ob-

serve the motions of the two objects, and could perceive that one gained ground considerably on the other; we continued to doubt as to their being men until just before losing sight of them in the twilight we could discern that the one behind dragged a sledge. Nothing more could be done until the morning, as it would have been impossible to have found their track in the dark; observing, on our return, a shovel in a bank of snow, we suspected that venison had been dug out, and in searching about found a fine heart and liver, which afforded a good supper for the party, whom we did not rejoin until dark; one-third of the men were in succession under arms, during the night, which proved cold and restless to all.

24th. Wind N.E. and intensely cold. Having refreshed ourselves with breakfast and a dram to each, at 4 A.M. commenced our march along the east shore of the lake with the utmost silence: beyond the point from whence I had the last view of the two natives, we fell in with a quantity of venison in carcasses and quarters, close to which was a path into the wood. Conjecturing that the habitations of the Indians were not far off, we advanced in and found the remains of one; the party complained much of the cold, and occasionally sheltered themselves under the lee of projecting points. It now became necessary to cross the pond in order to gain the track of the sledge we had seen; this exposed us entirely to the bitterness of the morning, and all complained of excessive cold. With the first glimpse of morn we reached the wished-for track, which led us along the western shore to the north east, up to a point, on which stood an old wigwam; from thence it struck across for the shore we had left. As the day opened it was requisite to push forward with celerity to prevent being seen and to surprise the natives, if possible, while asleep. Canoes were soon descried, and shortly after wigwams, two close to each other, and a third about a hundred yards from the former. Having examined the arms, and charged my men to be prompt in

executing such orders as might be given, at the same time I strictly ordered them to avoid every impropriety, and to be especially guarded in their behaviour towards the women. The bank was now ascended with great alacrity and silence; the party being formed into three divisions, the three wigwams were at once secured; we called to the people within, but received no answer; the skins which covered the entrance were then removed, and we beheld groups of men, women, and children lying in the utmost consternation; they remained absolutely for some minutes without motion or utterance. My first object was now to remove their fears and inspire confidence in us, which was soon accomplished by our shaking hands and shewing every friendly disposition. The women very soon began to embrace me for my attention to their children; from the utmost state of alarm they soon became curious, and examined our dress with great attention and surprise. They kindled a fire and presented us with venison steaks, and fat run into a solid cake, which they used with lean meat. Every thing promised the utmost cordiality; knives, handkerchiefs, and other little articles were presented to them, and in return they offered us skins. I had to regret our utter ignorance of their language, and that the presents were at the distance of at least twelve miles. The want of these occasioned me much embarrassment; I used every endeavour to make them understand my great desire that some of them should accompany us to the place where our baggage was, and assist in bringing up such things as we wore; which at last they seemed perfectly to comprehend. We had spent three hours and a half in conciliatory endeavours, and every appearance of the greatest amity subsisted between us; and considering a longer delay useless, without possessing the means of convincing them further of our friendship, we indicated our intention of setting out and speedily returning, on which four of them signified that they would accompany us. James Butler, Corporal, and Thomas Bouthland, private of marines, re-

quested to be left behind in order to repair their snow shoes; and such was the confidence placed by my people in the natives that most of the party wished to be the individuals to remain among them. I was induced to comply with the first request from a motive of shewing the natives a mutual confidence, and cautioning them to observe the utmost regularity.

Having myself again shaken hands with all the natives, and expressed, in the best way I could, my intention to be with them the following morning, we set out; and they expressed their satisfaction by signs on seeing that two of us were going to remain with them. On reaching the river head, two of the Indians struck off into our last night's resting-place; one of them I considered to be their chief; finding nothing here he directed two of the four to continue on with us; they proceeded with cheerfulness, though at times they seemed to mistrust us. The banks of the river being narrow and winding occasioned, at times, a considerable distance between me and the Indians, and one of them, having loitered behind, took the opportunity on our doubling a point to run off with great speed, calling out to his comrade to follow. This incident I considered to be unfortunate, as we were now nearly in sight of our party with the baggage. I thought it not improbable but that he might have seen the smoke and taken the alarm. Certainly no one act of any of my people could have given rise to any such conduct; he had, however, evidently some suspicions, as he had frequently come up, looked steadily in my face as if to read my intentions. I had been most scrupulous in avoiding every action and gesture that might cause the least distrust. In order to try the disposition of the remaining Indian he was made to understand that he was at liberty to go if he chose, but he shewed not the least wish of this kind.

At 3 P. M. we joined the rest of our party, when the Indian seemed to be startled on seeing so many more men; but this was but of momentary duration, for he soon be-

came pleased with all he saw; I made him a few presents, and shewed him the articles which were to be taken up for his countrymen, consisting of blankets, woollen wrappers, and shirts, beads, hatchets, knives, and tin-pots, thread, and fish-hooks, with which he appeared much satisfied, and regaled himself with tea and broiled venison, for we brought down two haunches with us in the evening. A pair of trowsers and vamps being made out of a blanket, and a flannel shirt being presented to him, he put them on with sensible pleasure, carefully avoiding any indecency; being under no restraint, he occasionally went out, and he expressed a strong desire for canvass, pointing to a studding sail which covered us in on one side; and he lay down by me during the night. Still my mind was somewhat disturbed lest the native Indians, on the return of their comrade that had deserted us, might be induced, from his misrepresentation and from fear, to have quitted their wigwams to observe our motions; but I was willing to suppress my alarm for the safety of our men left with them, judging that they would not be inclined to commit any violence, particularly until they should see whether we returned and brought back their companion; I was moreover satisfied that the conduct of my men would not give occasion for animosity.

25th. Wind N.N.E. and boisterous, with sleet; set out, leaving only eight of the party behind. On coming up to the river-head, we observed the tracks of three men crossing the frozen lake in a direction for the other side of the river; the violence of the wind with the sleet and drift snow rendered it laborious to get on, and the air was so thick at times that the party could frequently not discern each other, although at no great distance. When we had reached within half-a-mile of the wigwams, the Indian, who walked sometimes on before and at other times by my side, pointed out an arrow sticking in the ice; we also perceived the recent track of a sledge. At 2 P. M. we arrived at the wigwams, when my apprehensions were unfortunately verified; they

were left in a state of confusion, and little remaining in them but some deer skins. A quantity of venison packs had been conveyed a little way off and deposited in the snow; a path led into the wood, but only to a short distance. Perceiving no marks of violence to have been committed, I hoped that my former conjectures would be realized and that all would yet be well; the actions of the Indian, however, were indicative of extreme perplexity, and not to be described. Having directed the fire to be removed from the wigwams, we now proceeded into one more commodious; but on one of our people taking up a brand to light the fire, the Indian appeared terrified to the last degree, and used his utmost endeavours to prevent its being carried out; either apprehending that we were going to destroy the wigwams and canoes (of which latter there were six), or that a fire was going to be kindled for his destruction. For some time he anxiously peeped through the crevices to see what was doing, for he was now no longer at liberty but a prisoner. Perplexed how to act, and the evening drawing on, anxiety for the two marines determined me to let the Indian go, trusting that his appearance and recital of our behaviour would not only be the means of our men's liberation, but also that the natives would return with a favourable impression. Giving him therefore several articles, I endeavoured to make him understand that I wished his party to return, and by signs intimated a hope that our people would not be ill-treated; he smiled and remained by us; he put the wigwams in order, and several times looked to the west side of the pond and pointed. Each wigwam had a quantity of deer's leg-bones ranged on poles (in all three hundred); having used the marrow of some of those opposite that we occupied, the Indian replaced them with an equal number rom one of the others, signifying that those were his; he pointed out a staff and shewed that it belonged to the person that wore the high cap, the same that I had taken to be the chief; the length of this badge was nearly six feet, and it was stained of a red colour.

The day having closed in, the wind began to blow very hard, with hail, sleet and rain. I saw the necessity of being prepared for any attack that might be made on us. The wigwam being of a circular form, a division of the party was stationed on each side of the entrance, so that those on guard could have a full command of it; the door-way was then closed up with a skin, and orders given for no one to go out. The rustling of the trees, and snow falling from them, would have made it easy for an enemy to advance close to us without being heard. I had made an exchange with the Indian for his bow and arrows, and at eleven o'clock laid down to rest; but had not been asleep more than ten minutes, when I was aroused by a dreadful scream, and exclamation of "O Lord," uttered by Matthew Hughster; starting up at that instant in his sleep, the Indian gave a horrid yell, and a musket was instantly discharged. I could not at this moment but admire the promptness of the watch, with their arms presented and their swords drawn. This incident, which had like to have proved fatal, was occasioned by John Guienne, a foreigner, going out; he had mentioned it to the watch; in coming in again, the skin covering of the doorway made a rustling noise; Thomas Taylor, roused by the shriek, fired direct against the entrance, and had not Hughster providentially fallen against him at the moment, which moved the piece from its intended direction, Guienne must inevitably have lost his life. The rest of the night was spent in making covers of deer skins for the locks of the arms.

26th. Wind E.N.E. blowing strong, with sleet and freezing weather. As soon as it was light the crew were put in motion, and placing an equal number of blankets, shirts and tin pots in each of the wigwams, I gave the Indian to understand that those articles were for the individuals residing in them; some more presents were given to him, as also some articles attached to the Red Staff, all which he seemed to comprehend. At 7 A.M. we left the place, intending to

return on the Monday following; seeing that the Indian came on, I signified my wish for him to go back, he however continued with us, sometimes running on a little before in a zig-zag direction, keeping his eyes on the ice as having a trace to guide him, and once pointed to the westward, and laughed. Being now about two-thirds of a mile from the wigwam he edged in suddenly, and for an instant halted; then set off in full speed. We observed that for an instant he stopped to look at something lying on the ice; but in another instant we lost sight of him in the haze. On coming up we recognized with horror the bodies of our two unfortunate companions lying about a hundred yards apart; that of the corporal was pierced by an arrow in the back; and three arrows had entered the other: they were laid out straight with the feet towards the river, and backs upwards, their heads were off, and no vestige of garments left; several broken arrows were lying about, and a quantity of bread, which must have been emptied out of the knapsacks; very little blood was visible. This melancholy event naturally much affected all the party, but these feelings soon gave way to sensations of revenge: although I was fully aware of the possibility of finding out the route they had taken, yet prudence called on me to adopt another line of conduct; that all our movements had been watched I could have no doubt; and my mind became seriously alarmed for the safety of those who had been left with the sledges; I conceived it, therefore, of the utmost consequence to lose not a moment in joining our party. Having, therefore, given to the people some little refreshment, I caused them to be formed into a line of march, those having fire-arms being in the front and rear, those with cutlasses remaining in the centre, and all were charged to keep as close together as the intricacies would permit. On opening the first point of the river-head, one of the men said he observed an Indian look round the second point, and fall back; on coming up we perceived that two men had certainly been there, and had re-

treated; we afterwards saw them at times at a good distance before us; the tracks shewed that they had shoes on; this caused considerable perplexity; the guides, and indeed all the party, were of opinion that the Indians had been to the sledges, and that those two were returning down the river to draw us into a trammel, for they supposed a body of them to be conveniently posted to take advantage of us in some difficult pass. These conjectures were probable; they strongly urged my taking to the woods, as being more safe; although this was certainly true, it would have been attended with great loss of time, as from the depth and softness of the snow, we could not possibly perform it under two days; but as the immediate joining my people was paramount to every other consideration, for our conjectures might be erroneous, and as I was, in this instance, fain to suspect that curiosity had predominated over the obligations of duty, and that want of consideration had led our men up to view the pond, I therefore continued on by the river side. At noon we arrived at the fire-place, and finding all well I experienced great relief after four hours spent in unutterable anxiety for their fate. The two men who had acted so imprudently were easily discovered by the sweat which still rolled down their faces. Being made acquainted with the uneasiness they had occasioned, contrition for their misconduct was manifest, and I was willing to overlook it. Nothing now remained for us but to make the best of our way down the river; especially as a thaw had set in and the ice of the river was speedily breaking up. We therefore set forward, and after a most painful journey of four days, chiefly through soft snow or water, succeeded in reaching the Adonis on the 30th January.

It will not be expected that I can give much information respecting the Indians of Newfoundland. Of a people so little known, or rather not known at all, any account, however imperfect, must be interesting. It appears then that they are permanent inhabitants, and not occasional visitors.

Their wigwams are of two kinds; one of a circular form, and the other octagonal. The first of these consists simply of a few poles supported by a fork, such as are common to various tribes in North America; but this kind is used only as a summer residence whilst employed in the lakes and rivers procuring food for the winter. Those in which I found them were of the octagonal structure, and were constructed with very considerable pains. The diameter, at the base, was nearly twenty-two feet; to the height of about four feet above the surface was a perpendicular wall or fence of wooden piles and earth; on this was affixed a wall-plate, from which were projected poles forming a conical roof, and terminating at the top in a small circle, sufficient for emitting the smoke and admitting the light; this and the entrance being the only apertures; a right line being drawn to equal distances from each of the angular points towards the centre was fitted neatly with a kind of lattice-work, forming the fronts of so many recesses which were filled with dressed deer skins. The fire was placed in the centre of the area, around which was formed their places of rest, every one lying with his feet towards the centre, and the head up to the lattice-work partition, somewhat elevated. The whole wigwam was covered in with birch bark, and banked on the outside with earth, as high as the upright wall, by which these abodes, with little fuel, were kept warm even in the inclemency of the winter. Every part was finished in a manner far superior to what might reasonably have been expected. According to the report of William Cull, the storehouses seen by him were built with a ridge pole, and had gable ends; and the frame of the store which we saw on the island, I conceive to be of that description, as it certainly had a ridge pole. Their canoes were finished with neatness, the hoops and gunnels formed of birch, and covered in with bark cut into sheets, and neatly sewed together and lackered over with gum of the spruce-tree. Their household vessels were all made of

birch or spruce bark, but it did not appear that these were applied to any purpose of cookery: I apprehend they do not boil any part of their diet, but broil or roast the whole; there were two iron boilers, which must have been plundered from some of our settlers; to what purpose they may apply these is uncertain, but they appeared to set a great value on them, for on deserting the wigwam, they had conveyed them out of our sight. They were well supplied with axes, on which a high value is set; these they keep bright and sharp, as also the blades of their arrows, of which we found upwards of an hundred new ones in a case.

The reports of the settlers have always magnified the Newfoundland Indians into a gigantic stature; this, however, is not the case as far as regards the tribe we saw, and the idea may perhaps have originated from the bulkiness of their dress. They are well formed, and appear extremely healthy and athletic, and the average stature of the men may probably reach five feet eight inches. With one exception, their hair was black; their features are more prominent than any of the Indian tribes that I have ever seen, and from what could be discerned through a lacker of oil and red ochre (or red earth) with which they besmear themselves, I was led to conclude them to be fairer than the generality of Indian complexions. The exception with regard to the hair, was in that of a female, bearing all the marks of an European, with light sandy hair, and features strongly resembling the French, apparently about twenty-two years of age; she carried an infant in her cossack; her demeanour differed very materially from the others; instead of that sudden change from surprise and dismay to acts of familiarity, she never uttered a word, nor did she ever recover from the terror our sudden and unexpected visit had thrown her into. The dress of these Indians consisted of a loose cossack, without sleeves, but puckered at the collar to prevent its falling off the shoulders, and made so long that when fastened up round the haunches

it becomes triple, forming a good security against accidents happening to the abdomen; this is fringed round with a cutting of the same substance; they also wear leggins, mockisons, and cuffs, the whole made of the deer-skin, and worn with the hair side next to the body, the outside lackered with oil and earth, admirably adapted to repel the severity of the weather; the only difference in the dress of the two sexes, is the addition of a hood attached to the back of the cossack of the female for the reception of children. The males, on having occasion to use their bows, have to disengage the right shoulder and kneel down on the right knee; the bow is kept perpendicular, and the lower extremity supported against the left foot; their arrows display some ingenuity, for the blade, which is of iron, is so proportioned to the shaft, that when missing their object in water it does not sink; the feathers which direct its course become now a buoy, and they take it up at pleasure; the blade of the arrow is shouldered, but not barbed. Their snow shoes, or racketts as they are called by some, differed from all others that I have seen; the circular part of the bow, which was cross barred with skin-thong, was in breadth about fifteen inches, and lengthways near three feet and a half, with a tail of a foot long; this was to counter-balance the weight of the front, before the fore cross beam. So far their make is like ours, with the difference of length, which must be troublesome in the woods; but if my conjectures are right, they travel but little in the woods when the snow is on the ground; now this being placed on the ground and the foot in it, it forms a curve from the surface, both ends being elevated. Their reason for this is obvious, for the twofold purpose of preventing any quantity of snow from resting before the foot, and the other to accelerate their motions. Without causing suspicion, I could not venture to ascertain their exact numbers; but I conceived there could not be less than thirty-five grown-up persons, of whom probably two thirds were women, some

of the men being probably absent; the number of children was about thirty, and most of them not exceeding six years of age, and never certainly were finer infants seen.

Whatever their numbers may be in the interior of Newfoundland, there did not appear to be any want of provisions; the quantity of venison we saw packed up was very considerable; there were besides on the margin of the pond whole carcasses, which must have been killed ere the frost set in, seven of them being frozen within the ice; the packs were nearly three feet in length, and in breadth and depth fifteen inches, packed up with fat venison cleared of the bone, and in weight from a hundred and fifty to two hundred pounds, each pack being neatly cased round with bark. The lakes and ponds abound with trout, and flocks of wild geese annually visit them in the months of May and October; and their vigorous appearance points out, that the exercise to procure food is only conducive to health.

The opinion, therefore, of their numbers being few, because of their not being seen so much as formerly, is I think an erroneous one. That they should not appear near the coasts of the island is easily explained. The settlers thought they could not do a more meritorious act than to shoot an Indian whenever he could fall in with him. They were thus banished from their original haunts into the interior, of which they had probably but little knowledge, their chief dependance for food being fish and sea fowl. They probably were not then as now provided with the proper implements for killing deer, at least in sufficient quantities for their subsistence. As our establishments and population increased to the northward of Cape Freels, they were obliged to retreat farther from the coast; but the same evil that forced the natives to retreat, brought with it the means whereby they might still procure subsistence with a more independent life; for as the fisheries increased and the settlers became more numerous, the natives were enabled to obtain iron and other articles by plunder and from wrecks.

There are various opinions as to the origin of the Newfoundland Indians; some conceiving them to have come from the continent of America, others that they are the descendants of the old Norwegian navigators, who are supposed to have discovered this island near a thousand years ago. I had persons with me that could speak the Norwegian and most of the dialects known in the north of Europe, but they could in no wise understand them; to me their speech appeared as a complete jargon, uttered with great rapidity and vehemence, and differed from all the other Indian tribes that I had heard, whose language generally flows in soft melodious sounds.

The general face of the country in the interior exhibits a mountainous appearance, with rivers, ponds, and marshes in the intermediate levels or valleys; the timber, which is mostly white and red spruce, fine birch and ash, is much stunted in its growth, and those trees which have arrived at any considerable dimensions are generally decayed at the heart. In advancing into the interior, the birch diminishes both in size and quantity till it almost wholly disappears. In many places the woods are burnt down for a considerable extent, and in others young woods have sprung up, and their several growths evidently shew the fires to have been made at different periods, but none had been burnt for thirty miles below the lake; this general remark is made from observation on the banks of the river. The pond on which the natives were found does not appear to have been discovered from any excursion from the north side of the island; but there is no question of its having been seen in some route from the Bay of Islands along by the Humber River, or from St. George's Bay by a communication of waters; for in Cook and Lane's chart, published by Laurie and Whittle in May 1794, there is a pond delineated, which, from relative distances and appearances, I have no doubt to be the same on which our unfortunate companions lost their lives.

No. II.

A Relation of the Discovery of the Strait of Anian; made by me, Capt. Lorenzo Ferrer Maldonado, in the Year 1588; *in which is given the Course of the Voyage, the Situation of the Strait, the Manner in which it ought to be fortified, and also, the Advantages of this Navigation, and the Loss which will arise from not prosecuting it.*

SIRE,

IT will be necessary, in the first place, to state the advantages which may result from the navigation of the Strait of Anian into the South Sea:—Having well considered the route which has hitherto been taken to the Philippines, China, Japan, and other parts of that sea, it appears from correct charts that almost half the length of the voyage will be saved by sailing through this strait. This will easily be perceived on inspecting a terrestrial globe, or a map having the pole in its centre, though not apparent on a plain chart, which exhibits the meridian at the very pole as large and expanded as if it were the equinoctial line; and therefore in such charts one route will not seem shorter than another: this theory may perhaps require demonstration—yet it is unnecessary to treat of it here; suffice it to say, that by navigating this strait, little short of half the voyage is abated;—besides this advantage, it is productive of another much greater, namely, that after one embarkation a ship may proceed directly from Spain to the Philippines; but it cannot tend to shorten the voyage when it is necessary to disembark in New Spain and proceed one hundred and fifty leagues over-land. Hence it happens that the greater number of the people, who are sent to those parts as recruits, remain in New Spain, either exhausted by the

fatigues of the voyage, or attracted by the delights of that country. Besides this it has also another great advantage; namely, that your Majesty, (trading with all the spiceries of the Moluccas, the archipelago and other parts,) by means of this strait, might have sole possession of that trade with the greatest ease; and storing its produce up in the magazines of Seville, it would yield more than five millions a year, obliging many nations to come to Spain for that commodity,—and, in return, they would bring in abundance all things necessary for those kingdoms, rendering it needless to export the silver which comes every year from India, by which Spain is left in such great want of specie. Let it be remembered also, that by navigating this strait it is in our power to prevent the trade between China and India, and to transfer it to Spain, which will also extend to the Philippines and the countries in those parts; for the trade of China with India has been most disadvantageous to Spain, since it has obstructed the greater part of the trade Spain used to carry on. This is proved to be the cause why your Majesty's commerce is so much diminished; while China and the Philippines carry on this trade with India to such an extent, that it is impossible for us to maintain our possessions there, as is requisite, in order to resist our enemies, who are numerous; in consequence of which they must decline and fall to nothing:—whereas, on the contrary, by navigating this strait, they might increase so much in number, wealth and power, that they would attract fleets of merchant ships in as great numbers as those which go to India, producing to Spain great abundance of the products of China and Tartary, and of other lands at a very cheap rate; for of gold alone we may obtain two millions every year, from which we may derive great profit, since gold in China is of less than half the value that it is here; added to which, many other commodities may be acquired, which now these kingdoms are supplied with by their very enemies, who

thereby enrich themselves and gather strength to make war against us.

It is of great consequence also to supply those possessions with soldiers for their defence; and this we might do with great facility by means of this strait, and prevent our enemies from becoming masters of them, as might be the case for want of soldiers and assistance. And God being willing, by means of this navigation we should have an opportunity of converting the inhabitants of those parts, for whose souls it pleased God to suffer—which would be, if not the greatest of all advantages, certainly not the least. Many other things might be offered in favour of this navigation—the most essential, however, is evidently how to prevent the great disadvantages which would result from not examining and fortifying the Strait of Anian; for since it is no longer a matter of doubt that such a place exists, as I testify to have seen it myself, it is very evident how great a misfortune it would be were it discovered and fortified by our enemies, who are endeavouring to find it with great earnestness, as we know that last year (1608) they sent out a ship from England to look for it. The Strait of Anian being occupied by our enemies, would occasion serious injury to us; as on account of their vicinity to it, they might easily send through it their fleets which, divided into squadrons of thirties, might make themselves masters of the possessions of New Spain and Peru; where, declaring to the natives of India freedom and liberty of conscience, it is probable that many of them, if not all, would go over to them; and thus they might strengthen themselves in those seas to such a degree that we, having no place from whence we might quickly send succours, might be irrecoverably deprived of our territories; and this danger is so much to be feared, that even if we were not assured by our own eyes that in the South Sea exists this strait, we should be anxious to seek for it, in order to fortify it, or to undeceive ourselves if there be no such place, and to satisfy our minds that no such danger

was to be apprehended. And here let me remark, that if our enemies have not occasioned us any very great losses in the South Sea, it is because they possess not a port of such consequence as that of the Strait of Anian. And now that I am commanded by your Majesty and the Council of State to give some account of this voyage, and of the method of fortifying the strait, it will be proper also to give the course to be steered, and the situation and harbour of that strait, with all the circumstances of my voyage; and beginning with the navigation, by attending to the following narrative, any good seaman will readily discover the strait.

Departing from Spain, suppose from Lisbon, the course is N.W. for the distance of four hundred and fifty leagues; when the ship will have arrived at latitude 60°, where the Island of Friesland will be seen, anciently called *File* or *Fule*. It is an island somewhat less than Ireland. From thence the course must be taken to the westward, running upon the parallel of 60° for one hundred and eighty leagues, which will bring the navigator to the land of Labrador, where the strait of that name or Davis's Strait begins, the entrance of which is very wide, somewhat more than thirty leagues; and the land on the coast of Labrador which is to the west is low, but the opposite side the mouth of the strait is composed of very high mountains. Here two openings will appear; between which are these high mountains. One of these openings runs E.N.E. and the other N.W.; that which runs E.N.E. must be left, which is the one on the right hand looking towards the north, because it leads to Greenland, and ultimately to the sea of Friesland. Taking therefore the contrary opening, and turning the prow N.W., by proceeding in this direction eighty leagues, the ship will be found in latitude 64°. Here the strait takes another turn to the north, continuing one hundred and twenty leagues, and as far as latitude 70°, when it again turns to the N.W. and continues in that direction

ninety leagues, which will bring the ship to latitude 75°, nearly at which place the whole Strait of Labrador will have been passed; that is to say, it begins at 60° and ends at 75°; being two hundred and ninety leagues in length, and having three turns or reaches, the first and last of which run N.W. and S.E. and the centre one north and south: being sometimes narrower than twenty leagues, and sometimes wider than forty, and containing many ports, bays and sheltering places, which might be of service in cases of necessity. As far as the 73d parallel the shores appear to be inhabited, for in many parts of the coasts we observed smoke.

To some persons it has seemed impossible to navigate at so high an altitude of the pole;—in answer to this it may be observed, that the Hanseatics live in latitude 72°, into whose harbour, namely, that of St. Michael, and in all the Bay of St. Nicholas, nearly a thousand merchant ships enter every year, which, in order to go to the sea of Flanders, must necessarily ascend to latitude 75°. Having cleared the Strait of Labrador we began to descend from that latitude, steering W.S.W. and S.W. for three hundred and fifty leagues, till we arrived in latitude 71°, when we perceived a high coast without being able to discover whether it was part of the continent or an island, but we remarked that if it was the continent it must be opposite to the coast of New Spain. From this land, seen at 71°, we directed our course to the W.S.W. for four hundred and forty leagues, until we came as low as 60°, in which parallel the Strait of Anian was discovered.

Thus the same course must be followed which I made, at least as far as Friesland; for I set sail from the Baccallaos in quest of that island to procure provisions and other necessaries, which we obtained from some islands lying near it called Zelandillas; they are three in number, one of which only is inhabited, and the other two serve as pastures for the cattle of the natives, who are rather savage,

though they seem to be Catholics or Christians.—Returning to our voyage—I say, according to my opinion, that it would be more prudent, when the Strait of Labrador is cleared, to coast along the opposite coast of New Spain, for two reasons; first, to discover what population it contains, and secondly, to seek for provisions and necessaries for the ships which have to sail through this passage.

According to the narrative above mentioned, it appears that the distance from Spain to Friesland is four hundred and fifty leagues, and from thence to Labrador one hundred and eighty, and to the termination of that strait two hundred and ninety, which make in the whole nine hundred and twenty leagues; and these added to seven hundred and ninety, which we found to be the distance from the north part of the Strait of Labrador to the Strait of Anian, make in the whole one thousand seven hundred and ten leagues for the distance between Spain and the Strait of Anian.

The season in which we freed the Strait of Ladrador was very rigorous, being the beginning of March; and as we were navigating the strait during the latter part of February, we suffered great hardships on account of the darkness, the cold, and the storms; the days during that time were short, and the cold so great, that the waves of the sea, which beat against the ship, froze on it in such a manner, that the vessel seemed to be one mass of crystal; and we were obliged to break the ice, for it grew so thick, that in some parts we found it more than a *palmo* in thickness.

It is a great mistake to suppose that this sea can freeze all over; for as it is spacious, and rapid currents are always running through the strait, these and the great waves occasioned by its continual motion will not suffer it to freeze; but on the borders of the sea, and the parts where it is quiet, I think it may freeze, and we perceived that the water which beat against the shores was frozen. This only I know, and it was told us in Iceland, that a strait of the

sea between Friesland and Greenland was frozen during the greater part of the year; because it was in the midst of mountains and high land on the side of Friesland, by which the rays of the sun were prevented from falling upon it; and being thus surrounded by high hills, it was not affected by the winds, which might have set its waves in motion, and therefore the continual calm had allowed it to be frozen, and rendered it unnavigable; and the same thing occurs in the seas above mentioned.

But when we returned through this Strait of Labrador, which was in the month of June and part of July, we enjoyed continual daylight, so that when we arrived at the arctic circle, or latitude 66½°, we lost not the sight of the sun, nor did it sink below the horizon until we came to the middle of the Strait of Labrador; and thus, from the sun continuing always above the horizon, the air was so warm, that we felt more heat than even in the central parts of Spain; yet when we exposed ourselves to the rays of the sun, they did not much incommode us; and because there are always great currents and winds coming from the north, the Strait of Labrador is easily and quickly cleared. The rapid currents, occasioned by the flux and reflux, are of great assistance in entering and departing from the strait, even when the winds are contrary; and as they blow incessantly from the north, it is needful, on departing from Spain to Anian, to take advantage of the tides; and this account we will now conclude with the course of the ship and the incidents of the voyage.

The strait we discovered in 60°, at the distance of 1710 leagues from Spain, appears, according to ancient tradition, to be the one which geographers name in their maps the Strait of Anian; and if it be so, it must be a strait having Asia on one side and America on the other, which seems to be the case, according to the following narration:—

As soon as we had cleared the strait, we coasted along the shores of America for more than one hundred leagues,

the head of the ship being turned S.W., until we arrived at 55° of altitude, on which coast there were no inhabitants, nor any opening to indicate the vicinity of another strait through which the South Sea flowing into the North might insulate that part; and from hence we concluded, that all that coast belonged to America, and that continuing along it we might shortly arrive at Quivira and Cape Mendocino. We left this coast, (which, as was before said, we knew to continue along,) and standing towards the west, we sailed four days with the wind abeam, so strong that we made thirty leagues a day; and having voyaged one hundred and twenty leagues, according to this calculation and to the point marked in the map, we discovered a very high land, and continuing along the coast, from which we kept at a convenient distance, to fulfil our object, always in the open sea; sailing at one time to the N.E., at others towards N.N.E., and again to the N., from whence it appeared to us that (for the most part) the coast trended N.E. and S.W. We could not mark any particular points, on account, as I before said, of our voyaging in the open sea; and, therefore, can only affirm, that it is inhabited very nearly to the strait's entrance, as we saw smoke rising up in many places. This country, according to the charts, must belong to Tartary or Cataia; and at the distance of a few leagues from the coast must be situated the famed city of Cambalu, the metropolis of Tartary.

Finally, having followed the direction of the said coast, we found ourselves at the entrance of the same Strait of Anian, which, fifteen days before, we had passed through to the open sea, which we knew to be the South Sea, where Japan, China, the Moluccas, India, New Guinea, and the land discovered by Captain Quiros, are situated, with all the coast of New Spain and Peru. At the mouth of the strait, through which we passed to the South Sea, there is an harbour situated on the coast of America, capable of holding five hundred ships, though in some parts it is rough

and a bad roadsted, on account of the currents which, with the tide flowing from the north to the south, enter the harbour, and beat violently against one part of it not far from the mouth on going in on the right side. It must be understood that the mouth of the harbour is open to the north, and runs in an oblique direction. The shores of this harbour seemed never to have been touched by human footsteps. In a certain part there is a pool of stagnant water, on the borders of which we found an immense quantity of the egg shells of sea birds, which generally lay them on the shores of the sea; these appeared to have been brought there by the currents from the north, and were so many in number that they formed a wall a *vara* in height and eight *palmos* in breadth. We found in this harbour a large river of fresh water, so deep that we were able to enter with our ship to procure water; and I think a ship of five hundred tons burden might enter it. The greater part of this harbour has a sandy bottom, particularly near the place where the river flows into it, and where the currents beat; more to the north there is a sheltered spot formed by a rocky hill, more than two *picas* in height in some parts, upon which is a plane surface having a narrow neck, which the sea surrounds, leaving a jutting of land on the eastern side; on which situation an extensive colony might be planted, and for the present a fortress might be raised, which would be of great service. The land which adjoins this harbour is very pleasant, containing extensive plains on the south-east side coming in a point to the harbour, and these are bounded by a low mountain, in some parts of which we found rosemary. These plains being cleared might serve for neat farms or gardens, and on account of the situation the greater part of them might be well watered. Although this land is situated in latitude 59°, it is of a very pleasant temperature; because the mountains, which are, on the north side, shelter and defend all the land lying to the south. The climate is very good, for the cold of the

winter is not excessive, but on the contrary very moderate; because the country is always open to the rays of the sun, and is unaffected by the north winds, being only open to those which blow from the south, which are always temperate, and especially so there, because they come in a direct line from the sea. The proof of this was evident from the species of fruits which we found there. Although this land is in so high a parallel of latitude, it is not on that account less fit to be inhabited, since many other countries are so which run in the same parallel; namely, Edinburgh in Scotland, the principal cities of Sweden, Hapsalia and Ryga, cities in Livonia, Dublin in Ireland, Nidrosia, a city in Norway, many parts of Moscovia, and many other very pleasant countries which are inhabited, traded with, and well known; which, although they are free from the heat of this coast, are rather cold. The longest day of summer in this land is eighteen hours and a half, and the longest night in winter the same; therefore the summer nights are five hours and a half long, and the day in winter about as many.

Upon the banks of the river which flows into the harbour, and on those of another which is lower down on the south-east side, grow many large trees, most of them fruit-bearing; some similar to those of Spain, such as apples, pears, and wild plums, and others quite unknown, of divers forms; therefore, that we might fall into no danger, (as might possibly have happened,) I ordered my people not to eat any fruit which had not been pecked at by the birds by this means we avoided eating any hurtful fruit. Most of these were the fruits of last year remaining upon the trees, for in that season there was no ripe fruit, being the latter part of April, all May, and part of June; and as the fruit was preserved on the trees from one year to another, we knew that the winter could not have been very severe. We found in a valley surrounded by the river, which was low and apparently very temperate, wild grapes and lechias,

which is a delicious fruit from India, always found in temperate climates. At the head of the harbour, looking between north and east, and along all that quarter of the compass, there are mountains not very high but easy of cultivation, and abounding in all kinds of game, where we found partridges, rabbits, (somewhat different from those in Spain,) deer marked with black and white spots upon a grey skin, and long branching horns, but some had not any horns.

We saw two species of swine, one kind similar to those of India which have the navel in the spine, but larger, and the others resembling the "javalies" of Spain. We found also buffaloes and many other animals, but no beasts of prey. The sea produces abundance of fish, and all kinds of shell-fish are very good and savoury, larger than any we know of here; for we caught crabs half a *vara* in width, those of our coasts not being larger than the palm of a hand. The coast on the side of Asia or Tartary have very high mountains, so high that in some parts of their greatest altitude they are covered with snow all the year, particularly those which look to the north; and these are so rugged and craggy, that they appear incapable of cultivation; the greater part of the trees growing on them are very lofty pines, which grow down to the shores of the sea. In the same part of Asia, opposite the entrance of the harbour, there is a pool of stagnant sea-water, in which was growing a large plantation of reeds, springing up out of this same water, which we found to be an admirable fishing place; here we caught many large fish, some of them such as we had known before, namely, conger-eels, soles, and others, much larger than those which are found here. We saw numbers of large fish swimming past us in their way from the South to the North Sea. Among them were whales, porpoises, and other great monsters.

The Strait of Anian is fifteen leagues in length, and can be freed easily with a tide lasting six hours, and those tides

ure very rapid. There are six turnings in all this length, and two entrances, which lie from north to south. I mean, that the bearing of the two is north and south. The entrance on the north side (through which we passed) is less than half a quarter of a league in width, and on both sides there are two ridges of rocks; but the rock on the side of Asia is higher and more steep than the other, receding below in such a manner that nothing which falls from the upper part of the mountain can reach its base. The entrance into the South Sea near the harbour is more than a quarter of a league in width, and from thence the passage runs in a slanting direction, increasing the distance between the two coasts. In the middle of the strait, at the termination of the third winding, there is a great rock and an islet, formed by a rugged rock three "*estadas*" in height, more or less, and as its form is round, its diameter must be two hundred paces; its distance from the land of Asia is very little, but the sea on that side is full of shoals and reefs, and cannot be navigated but with boats. The distance between this islet and the continent of America is less than half a quarter of a league in width; and although its channel is so deep that two or even three ships might sail through together, it is near the shelving places of the banks upon which with little trouble there might be built two bastions, contracting the channel to musket-shot. Upon this island, or upon the shoals and the opposite coast, there might be raised, as was before said, two bastions, which, with the assistance of artillery, might guard and defend the strait in great safety; and if the currents were not so strong, there might be placed a chain which would be of great service; even now we might work with so much diligence as to overcome the currents. The situation of this strait is in such form, that with three watch-towers communicating with one another we might see out into the North Sea as far as thirty leagues, and by means of signals might give notice to the bastions and fortresses of the harbour

of the approach of any ships, and prevent them from proceeding through the strait, if they were enemies' ships, by retaining continually in the harbour two ships prepared for such an event; these should cross the course of the vessel, endeavouring to pass between the two bastions; and if she had to wait for the tide, they might delay and embarrass her while the fortresses are cannonading and sinking her; for it must be mentioned, that though many ships might come together, not more than two or three at once could pass through the channel: and if we should wish to have a look out to the South Sea, (though I do not think that necessary at present,) the strait has two high mountains, one on the coast of Asia, the other on that of America, which look one to another, and both of them adjoining to the fortress and watch-towers; and these, commanding a view over the two coasts in opposite directions, each might give notice of all the vessels sailing in the South Sea. By which means this strait might be well defended, and the Spanish alone might navigate it, and enjoy all the great advantages it holds out; for in truth I know of no place yet discovered which thus holds communication with almost all the countries of the world; for from this strait we may sail to all of them; and thus we may presume that in course of time it would prove a most powerful and rich settlement.

The entrance to the strait on the north side is most difficult to be discovered, because its coast runs east and west, and the two sides formed by the strait close one over the other; and as its entrance and the turns it makes are described to run north-east and south-west, it cannot be seen from the open sea, and it is therefore not surprising that it has escaped the notice of those who sought it. When we arrived there we did not discover it for some days, during which we were wandering up and down that coast, under the direction of the pilot, Juan Martinez, a Portugueze and a native of Algarve, an old man of great

experience; I found, however, that he was ignorant of the landmarks of these mountains, (which I copied for another voyage, if I should undertake it, which I think of doing); for although we knew the strait was to be found in 60° of latitude in the extensive coast running east and west, it occasioned us great doubt, as it appeared to the pilot that we had not arrived near the strait within one hundred leagues according to his reckoning of the ship's course, and to me it seemed that we were already near it, as it fell out; for, going in a boat to coast along the shores of the sea, the same current carried me through the strait, so that it was discovered. The reason of my conjecturing that we had arrived at the strait, and were close upon it, was occasioned by the strong currents we found there, running from the land and returning to it; they were so strong that at times, when in the open sea and at some distance from the coast, we found ourselves close upon it, and at other times, being near the land, we found ourselves in the open sea.

On the land close to the strait is a very high peak of a lofty mountain on the coast of Asia of a white colour; this peak is rugged and apparently inaccessible; on its highest point are three large trees which, when viewed from the north, are seen very distinctly one from another, and on each side of this high peak the mountains present the appearance of two ravines, easily perceived. One league from the mouth of the strait on the west side there is a high and steep rock, which is surrounded by the sea, and when the tide is low I think it may be distant from the coast four *picas*. At the eastern side of the entrance to the strait there is a large and beautiful river of fresh water and many trees on its banks, from which we watered our ship. Here is also a good sheltering place formed by two great rocks, which we found in this place. The mountains visible on the coast of Asia from the north side are very high indeed, being perceptible from the North Sea, having some very high trees growing on them, which seem to be mostly

pines; the mountains on the coast of America are lower and their trees are less, but on neither side do they appear to bear fruit.

In the harbour where our ship anchored, namely, the one mentioned as being at the entrance of the strait on the south side, we remained from the commencement of April to the middle of June; when a large vessel of eight hundred tons burden came there from the South Sea in order to pass through the strait, wherefore we put ourselves on our guard; but having come to an understanding with one another, I found them willing to give us some of the merchandise they carried, the greater part of which evidently consisted of articles similar to those manufactured in China, such as brocades, silks, porcelain, feathers, precious stones, pearls, and gold. These people seemed to be Hanseatics who inhabited the Bay of St. Nicholas or the Port of St. Michael. In order to understand each other, we were forced to speak Latin; those of our party who were acquainted with that language talking with those on board the ship who understood it. They did not seem to be Catholics, but Lutherans; they said they came from a very large city little more than one hundred leagues from the strait, and, though I cannot well remember its name, I think they called it *Robr*, or some such name, which they said had a good harbour and a navigable river, and was subject to the great Khan, as it belonged to Tartary, and that in that port they had left another ship belonging to their country. We could not learn more from them, for they acted with great caution and little confidence, being fearful of our party; wherefore we separated from them, and having left them near the strait in the North Sea, we set sail towards Spain. We had reason to think these people Hanseatics because, as they live in latitude 72°, it is easy and very advantageous to them to navigate this strait.

Having thus given a full account of the particulars of this voyage, and of the disadvantages which may be the

consequence of not following it up, it may be proper to give some account of the things needful to be provided by any person undertaking this voyage, and of the expenses which would be incurred by the necessary preparations.

List of Necessaries and of the Expenses of this Voyage.

In the first place there must be provided three ships; the principal vessel of one hundred and fifty tons burden, and the other two each one hundred, and these must be constructed with certain divisions in the hold, according to a plan which shall be given in due time. By this contrivance a vessel may be preserved from sinking even though a leak should spring in her bottom, because that division alone would be filled with water in which the damage occurred, and not any of the others, as the partitions would all be caulked; and even supposing the vessel should receive some damage between wind and water, the water will run out again at the same place in which it entered, as I am convinced of, by the experience of the ship in which I made this voyage. These ships should be cross-ribbed and lined with lead, having many knees and bolts, the heads of which must be closely let into the wood. The lower part of these vessels should be flat and well ballasted: being constructed in this manner, any one of the vessels will lie close to the wind and safe though situated near a lee shore, which is the greatest danger in which a ship can be placed; for these ships are very weatherly, and will lie within five points of the compass; and if by mischance they should happen to run aground on some sand-bank, which might happen in sailing through unknown seas, they would be got off with more ease than ordinary vessels; from having their bottoms flat they would not upset, and might hope for assistance from their companions in the open sea. It would be proper likewise to carry out two boats, one of them completely equipped, and the other capable of being so in case of necessity, in

event of the first being lost; and these must carry out oars, that they may better come up to their ships in all weathers, or perform other service which may be required; for this bark must sail near the coast within sight of the three ships, which must be always separated from each other four leagues at sea, and must give them notice of any remarkable circumstances which may appear on the coast, and therefore it is advisable that its commander be a man of intelligence, courageous, cautious, and trustworthy; this boat must be large enough to contain twenty butts of water in case of necessity; which together with the three ships and the cutter in frame, all of them fit for sea and well stored, will cost eight thousand ducats.

It would also be advisable to carry out in these ships six pieces of cannon, for as these ships must be very strong they can well sustain them; and also twelve lesser pieces; which eighteen pieces of cannon must be divided between the three ships, and will cost one thousand five hundred ducats. Also two hundred muskets, at three ducats each, will cost six hundred ducats. Moreover one hundred and fifty arquebusses, if it should be necessary to go on shore, at two ducats each, would cost three hundred ducats. Pikes, gunpowder, lead, fireworks, ropes, pumps, balls for the cannon and other ammunition, would come to seven hundred ducats. There must be three pilots, prudent, active men, and Spaniards, with their mates, and twenty-four good seamen, who must be divided between the three ships, who will return expert from this voyage, and may be the pilots of this passage: and finally, there must be employed two hundred men, and if possible the greater part must be seamen, because when it is necessary a sailor can serve as a soldier, but on no occasion can a soldier perform the duties of a mariner; all of whom must be divided in this manner: eighty men in the captain's ship, and in each of the other ships fifty men; and the twenty remaining in the bark, that if there should be occasion to make use of the oar, there may be people ready for that purpose;—and

these may be paid by the year, giving each of the pilots one thousand ducats, and each of the two hundred men forty-eight ducats, at the rate of four ducats a month, which will amount to nine thousand six hundred ducats a year. And because, among these two hundred men there must be experienced naval and military officers, these, attended with pilots, would make the expenses of a year amount to three thousand ducats.

There must be carried out supplies of cables, anchors, wood, pitch, hemp, and sails; tools, nails, and slips of lead, to repair any damage occasioned by the enemies' cannon, which will amount to one thousand five hundred ducats.

Also two hundred ducats' worth of wax tapers for the lanterns of the Captains and Commodore; for as the days in this passage are very long and the nights short, there will be no necessity for any more, for without doubt the sun will for many days not descend out of sight.

There must be divided among the ships two hundred ducats' worth of medicine. And, as all maritime affairs are uncertain, it would be well to carry out provisions for two years, for the wine at least may serve on returning; and thus reckoning upon the usual rations, there will be requisite for the three ships two thousand two hundred quintals of biscuit, which, costing four ducats a quintal, will amount to eight thousand eight hundred ducats. And as the biscuit may spoil, in default of which the people would suffer great inconveniences, it would be well to export four hundred quintals of flour, which, purchased at two ducats a quintal, will cost eight hundred ducats. The rations of wine during two years will amount to nine thousand one hundred and twenty-five measures of thirty-two pints, which, at the rate of six reals a pint, would cost four thousand nine hundred and seventy-seven ducats.

Hung beef, bacon, and chickens for the invalids, two thousand five hundred ducats; four hundred ducats' worth

of dried fish, six hundred ducats' worth of oil, vinegar, and pulse; three hundred ducats' worth of cheese, one hundred ducats' worth of salt—for it will be of much importance to carry out a good quantity, as it will be of use when there is plenty of fish, or when arriving at a place where meat can be procured, they may be preserved during the whole voyage by means of the salt.

All which expenses will amount to forty-seven thousand and seventy-seven ducats; and this is the utmost that the fitting out of the ships will cost, though there must be other lesser things which are absolutely necessary: and on good consideration it will be perceived how cheaply so great an advantage may be purchased, which is indeed one of the greatest that can now offer itself; for by this means may be prevented the great misfortunes which may befall the kingdoms of your Majesty from neglecting to navigate this strait; and finally, it will be advisable to take possession of whatever others may have seized upon, to our prejudice; for I know not in what the policy consists that would suffer strangers to take possession of that which has been discovered by Spaniards, particularly when it is in their power to injure us by so doing, and to make war on us: and not only this, but should they acquire possession of this strait, they will without doubt give the best fruits of this kingdom to the devil—the souls of the natives—disseminating among them their wicked and perverted doctrines; for we run all these risks by neglecting the navigation of this strait and leaving it free for our enemies, by which they may get possession of all those kingdoms,—and that they may do with greater facility by means of the recent discovery of Terra Australis; for as it is so large and extensive a region, (according to their account of it,) whoever has possession of it will also be masters of the whole South Sea; for if notwithstanding the distance of the route they have to pass, round the Cape of Good Hope, the enemy has found means to establish in India and those

parts six factories, and, as is reported, eight fortresses in the island of Tirnati, to the great prejudice of the territories of your Majesty; it is easy to perceive that if they should discover this short passage and convenient harbour, they might annoy us much more. On which account it is much more reasonable to consider the losses which may follow from not taking and fortifying this strait, than the expenses which would accrue from making the voyage; for whoever wishes to perform and to enjoy great achievements must suffer great expenses, and go through many anxieties. Finally, if your Majesty obtains the sovereignty of the seas, you will also obtain that of the land,—and if not, it will be difficult to preserve what we already possess; and this I speak as a man who has much experience of sea affairs, and well knows of how great value is the sovereignty of the sea, without which it is impossible to enjoy the empire of the land; and these last reasons will be sufficient for those who understand state affairs—and if there are any who are negligent of their duty, let them be vigilant and put themselves on their guard, for I suspect that we have many public and secret enemies, who have many motives for wishing ill to Spain; and let no one say, as I think has been said, that there is not money enough for such enterprises, since your Majesty is necessitous; and if there be any one who alleges this, and perceives his king to be in want, let him assist him with part of his riches, and not to forget that it will be better to dispose of them in this manner, than be deprived of all his possessions in some future time by the enemy: much as he may expend in this way, the man who undertakes to carry into execution so arduous an enterprise will lay out much more, for I, being a seaman, am not ignorant how many dangers attend it; he alone will bear witness to it, who shall experience the violence of the north sea, the storms and the turbulence of its waters. Certainly, sailing in company, and with such good ships as will be found for this voyage, there is no reason to

dread the sea however turbulent it may be; but they must coast along the shore for reasons mentioned elsewhere, and coasting along in such a rough sea is dangerous above all things, so much so, that there is no sailor whose courage would not fail him at the very thought of it; I think, therefore, that if there be any one willing to undertake it, it is advisable not to lose sight of him, for there may be found one who will do it, but I doubt whether there will be two; and let it be remembered, that such voyages cannot be of the least profit to the person who performs them, but on the contrary will be attended with many inconveniences and troubles to him. As to its profits, I know not whether it will be productive of any the first time; and we have no reason to be assured that our enemies may not have discovered this passage or some other which leads into the South Sea, because we know they are great seamen, and as enterprising as myself, ready to rush forward with impetuosity as I have done; and I repeat, Sire, that their desire to discover this strait is so great, (as I learn from the account of Captain Balthazar de Just, residing in Fontarabia, who was corresponding with me concerning this affair on the 6th of July, this year, 1609,) that the French have established a garrison on the banks of the river in Canada, which is three hundred leagues within Newfoundland, confident of discovering from thence a passage to the South Sea. I mention this, not because I think it likely that they will discover a passage, (because it is impossible that this river can run farther than one hundred leagues, for I coasted along the greater part of it to discover the coast of America about the South Sea, and I found no strait nor entrance of a river which was of any importance,) but I mention it, Sire, that your Majesty may perceive with what diligence our enemies are making use of every means of discovering a passage.

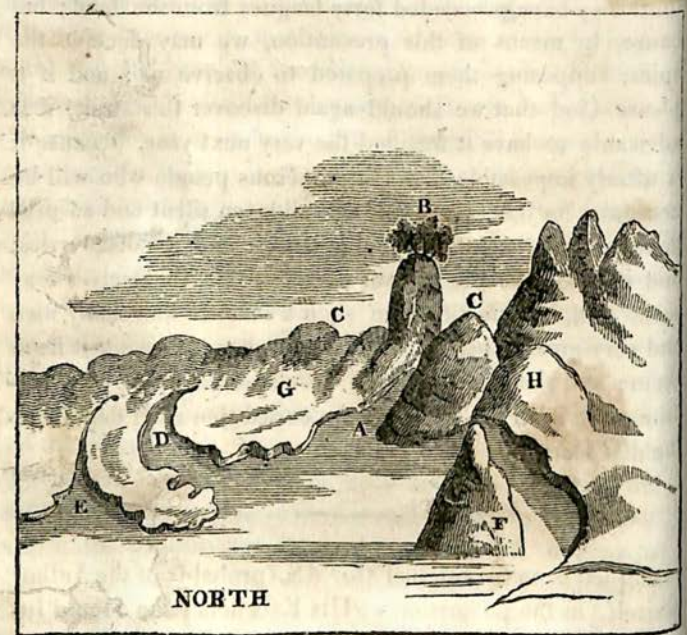
Also let me advise your Majesty, that if you should send an expedition on another voyage of discovery, let it be

done secretly, and arranged in such a manner that the captains must be commanded not to open their instructions until they have proceeded forty leagues from the land; because, by means of this precaution, we may deceive the spies, supposing them prepared to observe us; and if it please God that we should again discover this strait, it is advisable to have it fortified the very next year, because it is utterly impossible that the numerous people who will be necessary for this expedition will all be so silent and so prudent as not to make public this voyage and its discoveries; and if it is heard of by our enemies, they themselves may seek, find, and fortify it in such a manner that many men and very great expenses will be necessary to regain it from them; and therefore it would be advisable to be very circumspect from the moment the expedition shall depart for the discovery.

Copied from the original 4to. MS. (probably of the Author himself,) in the possession of His Excellency the Duc d'Infantado: from the same manuscript the map and sketches were also copied; all of which I have carefully revised with attention.

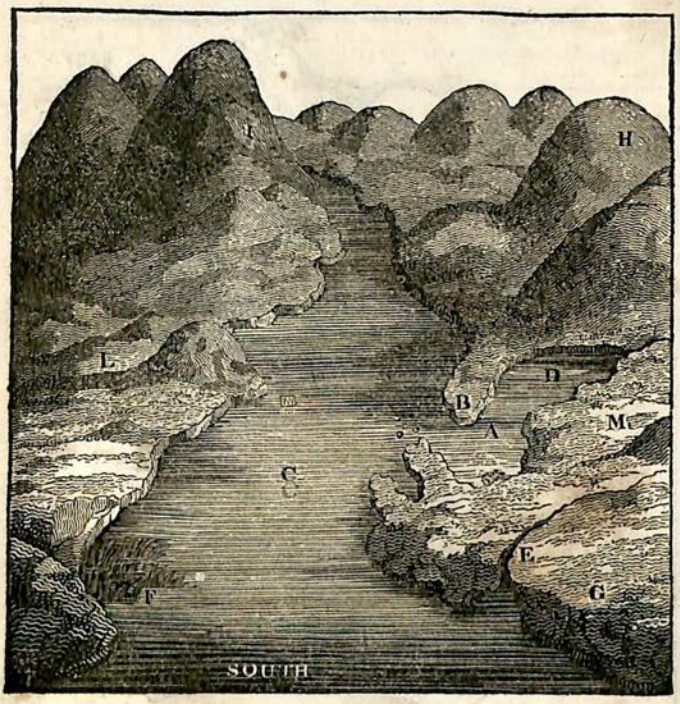
JUAN BAUTISTA MUÑON.

Madrid, 24th March, 1781.



A. *Mouth of the strait on the north side.*
B. *High peak with three trees.*
C. *Ravines.*
D. *Deep river, from whence we drew water.*
E. *Another river.*
F. *An insulated rock.*
G. *America.*
H. *Asia.*

A. *Harbour.*
B. *Situation to build upon.*
CC. *Mouths of the strait.*
DDD. *Watch towers, looking into the North Sea.*
EE. *Bastions, one on the island and the other on the continent.*
F. *Asia.*
G. *America.*



A. *Harbour, in which 500 ships may anchor.*

B. *Situation for a fort, or town.*

C. *Entrance to the harbour on the south.*

D. *Deep river of good water.*

E. *Good river with many fruit trees.*

F. *Plantation of reeds, near which is the good fishing place.*

G. *Level table mountains, capable of being cultivated as corn fields.*

H. *Mountains abounding in game.*

I. *High mountains with pine trees growing on them.*

L. *Asia.*

M. *America.*

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CHAPTER I.

DISCOVERIES IN THE NORTH, FROM THE EARLY PERIODS OF SCANDINAVIAN NAVIGATION, TO THE END OF THE FIFTEENTH CENTURY.

Iceland, Greenland, Labrador, and Newfoundland discovered by the ancient Scandinavians.—Discoveries of Nicolo and Antonio Zeno—Columbus—John and Sebastian Cabota—the Cortereals.

THE piratical expeditions of the ancient Scandinavians spread terror and dismay, by their destructive ravages, among all the maritime nations of Europe. "We cannot read the history," says M. Mallet, "of the eighth, ninth, and tenth centuries, without observing, with surprize, the sea covered with their vessels, and, from one end of Europe to the other, the coasts of those countries, now the most powerful, a prey to their depredations. During the space of two hundred years, they almost incessantly ravaged England, and frequently subdued it. They often invaded Scotland and Ireland, and made incursions on the coasts of Livonia, Courland, and Pomerania.—They spread like a devouring flame over Lower Saxony, Friezeland, Holland, Flanders, and the

banks of the Rhine, as far as Mentz. They penetrated into the heart of France, having long before ravaged the coasts: they every where found their way up the Somme, the Seine, the Loire, the Garonne, and the Rhone. Within the space of thirty years, they frequently pillaged and burnt Paris, Amiens, Orleans, Poitiers, Bourdeaux, Toulouse, Saintes, Angoulême, Nantes, and Tours. They settled themselves in Camargue, at the mouth of the Rhone, from whence they wasted Provence and Dauphiny, as far as Valence. In short, they ruined France, levied immense tribute on its monarchs, burnt the palace of Charlemagne at Aix-la-Chapelle, and, in conclusion, caused one of the finest provinces of the kingdom to be ceded to them." And he adds, what one would wish to be true, that these daring robbers, "sometimes animated by a more pacific spirit, transported colonies to unknown or uninhabited countries, as if they were willing to repair in one place the horrid destruction of human kind occasioned by their furious ravages in others."*

One of these pirates, in proceeding to the Faroe islands, in the year 861, was driven, by an easterly gale of many days continuance, so far to the westward, that he fell in with an island utterly unknown to him, and to which, from the great quantity of snow on the mountains, he gave the

* Mallet's Northern Antiquities, vol. i. p. 245.

name of *Snow-land.* Three years after his return, a Swede, of the name of Gardar Suaffarson, was induced to undertake a voyage in search of this newly discovered island, which he was fortunate enough to find; and, having spent the winter upon it, and reached home in safety the following year, he gave so lively a description of its fair woods and fertile soil, that one Flocke, or Flokko, was induced to try his fortune on Snowland. The mariner's compass being at that time unknown, and the foggy and clouded atmosphere of the north frequently hiding the face of the sun for days together, Flokko took the precaution of providing himself with a raven, or, as some say, four ravens, which, like Noah, being let loose in the midst of the ocean, might serve as a guide for him to follow. The first is supposed to have flown back to the land it had left; but on the second directing his flight to the westward, he followed the course taken by the bird, and found the land he was in quest of. He also passed the winter on the island, and, on his return, gave a less inviting picture of its appearance than that which had been painted by Gardar. From the severity of the weather, and the vast quantities of drift ice which filled all the bays on the northern side of the island, he changed the name to that of *Iceland,* which it ever after retained. Some of his companions, however, described it as a pleasant and fertile country; but no attempts appear to have been made towards a re-

gular establishment upon it, till the year 874, when one Ingolf, and his friend Leif, or Hiorleif, dissatisfied with the arbitrary authority of Harold Harfagre, king of the Norwegians, determined to abandon their country, and, as voluntary exiles, to seek an asylum in Iceland. On approaching the island, Ingolf, conformably with an ancient superstition of his country, threw overboard a wooden door, determining to make his first landing on that part of the coast to which the gods should direct this floating guide; but the current having carried it away from his sight, he landed in a fiord or gulf on the southern part of the island, which still bears his name.*

The report of their arrival having reached Norway, a number of families, with their followers and connexions, taking with them their cattle and furniture and implements of husbandry, embarked for this new colony, with a view of establishing their future residence there. It is mentioned as a fact in the Iceland annals, whose authenticity has rarely been called in question, that these early Norwegian colonists were fully persuaded that the island had been inhabited before their coming there; as wooden crosses, bells, and even books, were found near the shore, such as were then in use in Britain and Ireland. The distance is so short from Ireland, that it is not improbable that some

* Arngrim Jonas. *Chrymogæa.*

of its fishermen might have been driven thither, and left behind them these relics of Christianity;* or, as Forster supposes, some of the Norman pirates, with their booty, after plundering Ireland, may have directed their course to the westward, and left there these articles of their booty.†

Towards the close of the tenth century, a man of the name of Thorwald, being obliged to fly on account of a murder, set sail for Iceland. His son, Eric Rauda, or Eric the Redhead, having also been guilty of murder and many irregularities, soon followed. The latter set out from hence on an expedition to the westward in 982, and fell in with that part of the east coast of Greenland called Herjolf's Ness, and standing to the southward, entered a large inlet, which was called by him, or after him, Eric's Sound.‡ He passed the winter on a pleasant island in this sound, explored the coast in the following year, and in the third year returned to Iceland; and by a lively description and the most lavish praises of its green and pleasant meadows, and the abundance of fine fish on the coast, he induced a number of settlers to accompany him to this newly discovered country, to which, in comparison of its appearance with Iceland, he gave the name of Greenland. Such is the account of this discovery, as given by the northern historian

* Mallet's Northern Antiquities.
† Forster's Northern Voyages.
‡ Torfæi Groen. Ant.

and Icelandic judge Snorro; but Torfæus and some others contend that this country, as well as Iceland, was known before the times above mentioned; and the grounds for this opinion rest chiefly on the privilege granted to the church of Hamburgh in 834 by Louis the Débonnair, and a bull of Pope Gregory IV., wherein permission is granted to the Archbishop Ansgarius to convert the Sueones, Danes, Sclavonians, *Icelanders* and *Greenlanders;* but it is now supposed that the last two names have been interpolated by the church of Hamburgh, with a view to secure to itself certain rights over these countries; and that, the better to carry on this pious fraud, it had falsified the documents. Whether this be really the case or not, the church, it would appear, succeeded in its object, the Norwegian colonies having continued to pay to the bishops and the holy see, in the way of tythe and Peter-pence, two thousand six hundred pounds, in weight, of the walrus or sea-horse teeth.

The Norwegians and the Normans flocked in great numbers to Iceland, and a regular trade was established between the colonists and the mother country. About the year 1001, as one of the colonists, of the name of Herjolf, with his son Biorn, were proceeding on a trading voyage, their ships were separated by a storm, and Biorn was driven to Norway, where he soon afterwards learnt that his father Herjolf was gone to Greenland. On this information he set sail to the west

ward, intending to join him, but being driven by a storm a great way to the south-west he discovered, by chance, a fine plain country well clothed with wood. The relation which he gave of this new discovery, on his return to Iceland, inflamed the ambition of Leif, the son of Eric, who had founded the colony on the coast of Greenland. He immediately equipped a proper vessel, and taking with him his friend Biorn, they proceeded together in quest of the newly discovered land. On approaching the coast they observed a barren and rocky island, which they therefore named *Helleland;* and to the low sandy shore beyond it, which was covered with wood, they gave the name of *Markland.* Two days after this they fell in with a new coast of land, to the northward of which they observed a large island. They ascended a river, the banks of which were covered with shrubs, bearing fruits of a most agreeable and delicious flavour. The temperature of the air felt soft and mild to the Greenland adventurers, the soil appeared to be fertile, and the river abounded with fish, and particularly with excellent salmon. On proceeding upwards they discovered that the river issued from a lake, near which they resolved to pass the winter. On their return, they mentioned, among other things, that, on the shortest day, the sun was visible above the horizon eight hours; that a

German, who was one of the crew, in strolling into the woods, met with wild grapes, which he informed the Scandinavian navigators were such as, in his country, were used to make wine, upon which they gave to the island the name of Vinland.

The latitude deduced from the observation of the length of day, supposing it to be correct, would point out some of the rivers on the eastern coast of Newfoundland as the spot on which the adventurers wintered, several of which rivers take their rise in lakes; or it would equally answer to the coast of Canada, near the mouth of the river St. Lawrence. It is now known that vines grow wild in various parts of Canada, some of them pleasant to the taste and agreeable to the eye, such as the *vitis labrusca, vulpina,* and *arborea;** but whether any species may grow on Newfoundland, we know so little of the interior, or even of its shores, that, after a settlement of more than two hundred years, no attempt has yet been made to collect a Flora of the island. But it is by no means necessary to suppose that the fruit found by the German was the grape. *Wünbær* or *vin-ber* (wine-berry)† is the generic name, among the nations where the grape was not known, for the *ribesia* and *grossularia* (the various species of currants and gooseberries);

* Forster's Northern Discoveries.

† Dr. Percy—*Translation of Mallet's Northern Antiquities.*

and of the former of these, Canada, Labrador, the shores of Hudson's Bay, and Newfoundland, afford several species.* There is, therefore, no reason to call in question the veracity of the relation on account of the circumstance which gave the name of Vinland to the new-discovered country.

Though Newfoundland has now been settled more than two hundred years, it is scarcely yet known with certainty whether, in the interior, any natives are found with permanent habitations on the island, or whether they are not merely annual visitors, who come over from the continent in the summer months for the purposes of killing deer, bears, wolves, and other animals, whose skins are valuable for clothing and their flesh as food; and for catching salmon in the rivers, and collecting fowls and eggs on the intermediate islands. Many of these Indians have occasionally been met with in their boats near the coast, but from the ill treatment they experienced from the European fishermen, they withdrew themselves at an early period from their intruders, and have since studiously avoided all intercourse with them. It is this which makes a recent expedition into the interior of the island, under the command of Captain

* *Ribes prostratum* is a native of Newfoundland; and *R. reclinatum*, bearing a black berry resembling a grape, is found on the shores of Hudson's Bay. *Persoon*, Synop. Plant. i. p. 251.

Buchan, now on the northern voyage of discovery, the more interesting, from whose manuscript journal an abstract will be given in its proper place in the sequel.

Whether we are to consider Vinland as Labrador or Newfoundland is a matter of little importance, as the Scandinavians do not appear to have made any progress in the colonization of either country, though a recent discovery would seem to indicate the remains of an ancient colony, of which we shall presently have occasion to speak. These northern hordes, however, "thrust out of their exuberant hive," flourished with great rapidity on Iceland, in spite of its barren soil and rigorous climate. Religion and literature even took deep root where every luxury and frequently the common necessaries of life were wanting. The genius of native poetry survived amidst eternal ice and snows. The want of shady groves and verdant meadows, of purling streams and gentle zephyrs, was amply supplied by the more sublime and awful objects of nature,—storms and tempests, earthquakes and volcanos, spouts of liquid fire and of boiling water, volumes of smoke and steam and ashes darkening the air and enveloping the whole island, were the terrific visitors of this *ultima Thule* of the inhabitable world. "The scalds or bards," says Pennant, "retained their fire in the inhospitable climate of Iceland, as vigorously as

when they attended on their chieftains to the mild air of Spain, or Sicily, and sung their valiant deeds."*

The Greenland colonies were less fortunate. The great island (if it be not a peninsula) known by the name of Greenland, is divided into two distinct parts by a central ridge of lofty mountains, stretching north and south, and covered with perpetual ice and snow. On the east and the west sides of this ridge, the ancient Scandinavians had established colonies. That on the west had progressively increased until it enumerated four parishes, containing one hundred villages: but being engaged in perpetual hostility with the native tribes, in possession of this territory and of the neighbouring islands, to whom they gave the name of Skrœlings, but who have since been known by that of Eskimaux, the colony on that side would appear to have been ultimately destroyed by these hostile natives. The ruins of their edifices were still visible in 1721, when that pious and amiable missionary Hans Egede went to that country, on its being re-colonized by the Greenland Company of Bergen in Norway, and have since been more circumstantially described.

The fate of the eastern colony was, if possible, still more deplorable. From its first settlement by Eric Rauda in 983 to its most flourishing period

* Introd. to Arct. Zool. i. p. 44.

about the commencement of the fifteenth century, it had progressively increased in population; and, by the latest accounts, consisted of twelve parishes, one hundred and ninety villages, one bishop's see, and two convents—one of which is supposed to have been that which is described by Zeno as situated near the spring of hot water. A succession of sixteen bishops is recorded in the Iceland annals; but when the seventeenth was proceeding from Norway in 1406 to take possession of his see, a stream of ice had fixed itself to the coast and rendered it completely inaccessible; and from that period to the present time, no intercourse whatever has been had with the unfortunate colonists. Thormoder Torfager, however, relates, in his History of Greenland, that Amand, bishop of Skalholt in Iceland, in returning to Norway from that island about the middle of the sixteenth century, was driven by a storm near to the east coast of Greenland, opposite to Herjolfsness, and got so near as to be able to distinguish the inhabitants driving their cattle in the fields; but the wind coming fair, they made all sail back for Iceland. Hans Egede conceives this account of Amand worthy of credit, from which, he observes, "we learn that the eastern colony continued to flourish at least one hundred and fifty years after commerce and navigation had ceased between it and Greenland;" and he adds, "for aught we know to

the contrary, it is not yet wholly destitute of its old Norwegian inhabitants."*

The several attempts that have been made to approach this coast, bound in chains of "thick-ribbed ice," and to ascertain the fate of the unhappy colonists, will be noticed in their proper places. Hitherto, all endeavours have been fruitless, but the recent disruption of the ice from that coast may afford the opportunity of examining into the fate of the wretched inhabitants, and of ascertaining, if possible, in what manner they perished, after the closing of the icy barrier upon them, and whether any and what records or ruins have been left behind them. Such a research is at least an object of rational curiosity, and it would be a reproach to the Danish government, if it neglected the only opportunity that may occur for instituting this inquiry.

NICOLO AND ANTONIO ZENO. 1380.

The history of the noble family of ZENO is well known and celebrated in the records of Venice.

* Hans Egede, Crantz, Torfæus, and a host of writers, concur in the planting and destruction of these two settlements; yet in spite of these authorities, and the repeated attempts on the part of the Danish government to examine into the state of the ancient colony on the eastern coast, a M. Eggers undertook to prove, in 1792, that the eastern colony never had existence, and that it was only called *East* Greenland from being situated on the *west* side. This question will more properly be examined in the descriptive volume.

The extraordinary adventures of the two brothers NICOLO and ANTONIO, in the northern seas, were first published by Francesco Marcolini, in 1558, and afterwards in Ramusio's Collection of Voyages and Travels.* They are stated to have been drawn up from the letters sent by Antonio Zeno to his eldest brother Carlo, and delivered to Marcolini for publication by a descendant of the Zeno family, who laments the imperfect state into which they had fallen, by his ignorance of their importance at a time when he was incapable of exercising a judgment on their contents, and had carelessly and thoughtlessly destroyed some of them; that, however, in more mature years, he had collected together their scattered remains, and put them into order, with the view of preserving the memory of these early and interesting discoveries, made by his two noble relations.

From this circumstance, it is evident that great allowances must be made for what may appear to be inaccurate or mysterious; but the relation, as we have it in its mutilated state, contains so much curious and correct description, and so many interesting discoveries, that it must always maintain its ground as one of the most important in the history of early navigation. From this relation, it appears that Nicolo, being desirous of seeing foreign countries, fitted out a ship at his own ex-

* Dello Scoprimento del l'Isole Frislanda. Ramusio, Navig. et Viaggi, vol. ii. p. 220.

pense, and passed the Strait of Gibraltar, with an intention of visiting England and the Low Countries; but, in the course of his voyage, a violent storm arose, and his vessel was cast away on the coast of a large island which is called *Frisland*. Fortunately for him and his crew, he was saved from a savage attack made on them by the natives of the island, by the interference of a chieftain of the name of Zichmni, under whose protection he placed himself and all his people. This prince was also lord of certain small islands to the southward, called *Porland*, and duke of *Sorano*, lying opposite to Scotland. "Of these northern parts," says the narrator, "I drew out a copy of a navigation chart, which I still possess among the antiquities of our house."

This Zichmni, being a great warrior by sea, and finding Nicolo a man of judgment and discretion, and well experienced in sea affairs, engaged him in an expedition to the westward. It consisted of thirteen vessels, with which they took possession of *Ledovo* and *Ilofe*, and some other small islands, in which the Venetians obtained great renown, as well for their valour as their skill in sea affairs. On their return to Frisland, Nicolo was made captain of Zichmni's fleet, and so well pleased with the honours he received, that he wrote to his brother Antonio to join him; who accordingly fitted out a ship and proceeded thither, where he remained fourteen years, ten of them alone, and four in company with his brother Nicolo; the

latter of whom was again sent out on an expedition against *Estland*, which is situated between Frisland and Norway. After this he attacked and plundered seven other islands, which are named *Talas*, *Broas*, *Iscant*, *Traus*, *Mimant*, *Dambere*, and *Bres*, in the last of which he built a fort. In the following year, having fitted out three ships, he set sail in July towards the North, and arrived in *Engroneland*, where he found a monastery of predicant friars, dedicated to Saint Thomas, and situated close to a mountain, which threw out flames like Vesuvius and Ætna.

There was besides in this place a fountain of hot water, with which the church of the monastery and the chambers of the friars were heated, and which was also brought into the kitchen so boiling hot, that no other fire was made use of for dressing their victuals; and by putting their bread into brass kettles without water, it became baked as well as if it had been in a heated oven. They had also little gardens, covered over during winter, which being watered with this water, were defended against the snow, and cold, which, in those parts, by reason of their situation so near the pole, is most severe; and by these means the friars produced flowers and fruits, and herbs of various sorts, just as well as in more temperate countries; so that the rude and savage people of those parts, seeing these supernatural effects, considered the friars as gods, and brought them presents of chickens, flesh, and other articles, and held them in the

greatest awe and respect. When the frosts and snows are severe, the friars heat their houses in this manner, and temper the heat or cold at pleasure. Their buildings are made of the stones which are thrown out like burning cinders from the mountain, and which by throwing water on them become excellent white lime; when cold and not dissolved with water, they shape them with iron tools and use them in their buildings.

Their winter is said to continue for nine months their food to consist of wild fowl and fish; for the warm water runneth into a capacious haven, which, on account of its heat, it preventeth from freezing, and in consequence of this there is such a concourse of sea-fowl and such abundance of fish, that both are easily taken in vast multitudes, and enable the friars to maintain a great number of people, whom they keep in constant employment, in constructing their houses, in taking sea-fowl and fish, and in a thousand other matters relating to the monastery.

The trade of these friars with Norway and the neighbouring islands is then described; and it is observed, that to this monastery of Saint Thomas resort the friars of Norway, of Sweden, and of other countries, but mostly from Iceland. The boats of the fishermen are described as being in shape like a weaver's shuttle, and made of the skins and bones of fishes.

This curious account of Engroneland or Greenland is given by Nicolo to his brother Carlo; and

it appears that, during his residence at this monastery, being unused to such severity of weather, he fell sick, and died shortly after his return into Frisland. This Nicolo left behind him two sons in Venice, from one of whom was descended the celebrated Cardinal Zeno.

On the death of Nicolo, his brother Antonio succeeded to his property, and, unwillingly as it would seem, to all his dignities and honours, for he wished to return to his own country; but all his entreaties with Zichmni were unavailing; for Zichmni, "being a man of great courage and valour, had determined to make himself lord of the sea." At this time one of his fishermen returned to Frisland, after an absence of six and twenty years, and gave an account of his having been driven by a violent storm upon an island called *Estotiland*, about a thousand miles to the westward of Frisland. He related that the island was well peopled; that a man was brought to him who had likewise been shipwrecked, and who spoke Latin; that the island was nearly as large as Iceland, and more fertile, the people ingenious and skilled as artisans; that the prince had Latin books, but did not understand them; that they had gold and all manner of metals; that they raised corn, made beer, traded with Greenland, from whence they procured furs, brimstone, and pitch; that their buildings were made of stone; that they had extensive woods, of which they built ships, and

traded with a country to the southward called *Drogio*.

Zichmni, having heard this strange relation, which was confirmed by the crew who had come to Frisland with the fisherman, determined to set out with a great number of ships and men in search of these countries, and Antonio Zeno accompanied him on this expedition of discovery.

As they proceeded to the westward, the first point they fell in with was called *Icaria*, and beyond this they came to another country, whose temperature is said to have been inexpressibly mild and pleasant. To the haven in which they anchored they gave the name of *Trin*. In the interior were great multitudes of people, half wild, hiding themselves in caverns, of small stature, and very timid. Zichmni, finding this place to have a wholesome and pure air, a fruitful soil, and fair rivers, was so delighted with the country, that he determined to take possession of it and to build a city. But his people began to murmur and to express a desire to return, upon which he sent away Antonio to conduct back to Frisland all those who were unwilling to stay. They sailed for the space of twenty days to the eastward without seeing any land; then south-east five days, when they perceived the island of *Neome*, and, taking in fresh provisions, in three days more reached Frisland.

"What followed after the letter containing

this intelligence," observes the narrator, "I know not:" but from a piece of another letter of Antonio, it would appear that Zichmni built a town near the harbour on the island which he had discovered. The beginning of the letter he says is as follows:—

"Concerning those things that you desire to know of me, as of the men and their manners and customs, of the animals and neighbouring countries, I have set down particularly in a book, which, by the blessing of God, I will bring with me; wherein I have described the country, the monstrous fishes, the laws and customs of Frisland, Island, Estland, the kingdom of Norway, Estotiland, Drogio, together with the life of M. Nicolo, the knight our brother, with the discovery which he made, and the state of Engroneland. I have also written the life and acts of Zichmni, a prince as worthy of immortal memory as any that ever lived, for his great valour and singular humanity; wherein I have described the discovery of Engroneland on both sides and the city which he built. Therefore I will speak no further hereof in this letter, hoping to be with you very shortly, and to satisfy you in sundry other things by word of mouth."

The letters containing the curious and interesting narrative of the adventures and discoveries of the two Zenos were written by Antonio to his brother Carlo; "and it grieveth me," says the

narrator, "that the book and various other writings concerning these things should so lamentably have been destroyed; for being but a child when they fell into my possession, and not knowing of what importance they were; I tore them in pieces, as the manner of children is, which I cannot call to remembrance without the deepest grief."*

The more the narrative of the two Zenos has been scrutinized, the stronger has the internal evidence appeared in favour of its general veracity. The heating of the monastery, the cooking of the friars' victuals, and watering their gardens with hot water, were considered, however, by many as things utterly incredible. But we are now "wiser than of yore," and manage these things in the same manner as the monks of St. Thomas were wont to do in the fourteenth century. The great difficulty, however, among geographers was that of assigning a proper position for the island of Frisland; a name which occurs in the life of Christopher Columbus, and is placed by Frobisher as the southern extremity of Greenland. Ortelius maintained that it was a certain part of the coast of North America. Delisle† and some others supposed that Buss island, to the south of Iceland, was the remains of Friesland, which had been swallowed up by an

* Dello Scoprimento del l'Isole Frisland, &c. per Fran. Marcolini. 1558.

† Hémisphère Occidental, 1720.

earthquake;* and others again cut the matter short by considering the existence of Frisland, and even the whole voyage of the two Zenos, as a fiction. But M. Buache and M. Eggers have gone far to prove the truth of the narrative on two different grounds; the former having shewn that the geographical position of Frisland corresponds with the cluster of the Feroe islands;† and the latter, that the names given by Zeno correspond pretty nearly with the modern names of those islands.‡ Forster has tried the same thing, and finds a corresponding island for every name mentioned in the narrative of the two Zenos. He has also discovered that one Henry Sinclair was Earl of Orkney and possessor of the Shetland islands so far down as the year 1406; and as Sinclair or Siclair to an Italian ear might sound like Zichmni, he concludes that Sinclair is the prince mentioned by Zeno.§ The name even of the aggregate, *Feroesland*, differs not materially from Frisland. Estotiland may be Newfoundland or Labrador.

* It is got rid of in this way by the Duc d'Almadover, the Abbé Zurla and Amoretti; (*Voyage à la Mer Atlantique*, &c. *traduit par Ch. Amoretti;*) and Buss island itself is gone, if it ever had any existence above water.

† Mém. sur l'Ile de Frislande, dans l'Hist. de l'Acad. des Scien. 1784.

‡ Mem. sur l'Ancien Greenland. 1792.

§ History of Voyages and Discoveries made in the North, p. 209.

The name, says M. Malte-Brun, appears to be Scandinavian; "for *Est-outland* in English would signify land stretching farthest out to the east, which agrees with the situation of Newfoundland with regard to the continent of America."* The same author observes, that the inhabitants of Estotiland appear to be the descendants of the Scandinavian colonists of Vinland, whose language, in the course of three ages, might have been sufficiently altered to be unintelligible to the fishermen of Feroe. The Latin books (of which Zeno speaks) had doubtless, he thinks, been carried thither by that Greenland bishop, who, in 1121, betook himself to Vinland to preach the Christian religion in that country; that Drogio, on this hypothesis, would be Nova Scotia and New England; and he concludes, that by bringing together under one point of view the discoveries of the Scandinavians in the tenth and eleventh centuries, and the voyages of the two Venetians in the fourteenth, we must be persuaded that the New World has been visited by the nations of the north as far back as the year 1000; and that it may perhaps be thought that this first discovery, historically proved, after having been confirmed anew in 1390 by Zeno, may have been known to Columbus in 1477, (1467) when he made a voyage

* Précis de la Géog. Universelle, tom. i. p. 405.

into the northern seas. At any rate, that the most prejudiced, on casting a glance on the map, must be convinced that nature herself had designed Newfoundland to be the first for receiving the visits of Europeans.*

With regard to Columbus, too little remains on record, concerning his voyage to the north, even for hazarding any conjecture to what part, (beyond Iceland,) or for what purpose, it was undertaken. The discovery, however, which has just been made on Newfoundland would seem to corroborate the conjecture, that this island is the Estotiland of Zeno. A party of English settlers, in proceeding up the river which falls into Conception Bay, a little to the northward of St. John's, observed, at the distance of about six or seven miles above the bay, the appearance of stone walls, rising just above the surface. On removing the sand and alluvial earth, they discovered the remains of ancient buildings, oak-beams, and mill stones sunk in oaken beds. Enclosures resembling gardens were traced out, and plants of various kinds growing about the place not indigenous to the island. But the most decisive proof of these ruins being the remains of an ancient European colony was in the different kinds of coins that were found, some of ductile gold, which the inhabitants con-

* Précis de la Géog. Univer. tom. i.

sidered to be old Flemish coins, and others of copper without inscriptions.*

The coins, which are said to be in the hands of many of the inhabitants of St. John's, will probably decide the question, whether these newly discovered remains of a former colony be that founded by Zichmni, in the latter part of the fourteenth century, or some attempt at the establishment of a colony by the descendants of Eric and Biorn from Iceland in the eleventh century. The Scandinavians were in the practice of coining money before the tenth century, stamped with the impression of a sun, a star, or simply a cross, but without any inscription; and they also trafficked even before that period with foreign money, which they received principally from the Flemings.† One circumstance would seem rather to militate against the supposition of the recently discovered ruins being the remains of a Scandinavian colony. These northern settlers on Iceland and Greenland build chiefly with wood in countries where no wood grows. The ruins in question are of stone, and on a spot where timber grows abundantly. The probability, therefore, is in favour of their being the remains of the fort which Zichmni built on the banks of a fair river, if they may not be

* This information is received in a letter from Captain Buchan, written at the moment of his sailing on the Northern Expedition.

† Mallet's Northern Antiquities.

referred to a later date than either; for some of the old inhabitants, it seems, are impressed with the idea that Lord Baltimore had once intended to erect saw-mills in the neighbourhood of Port de Grasse, vestiges of which are said still to remain. It is an interesting subject, of which some more certain information it is to be hoped will speedily be procured.

CHRISTOPHER COLUMBUS. 1467.

The extraordinary discoveries of the Portugueze, but that of all others which opened them a route to India round the Cape of Good Hope, aroused the cupidity of some of, and the curiosity of all, the nations of Europe, and excited that spirit of enterprize in England, which, though it might sometimes languish, was never wholly extinguished; and which, indeed, is not likely ever to be extinguished so long as any part, however obscure or remote, of this globe we inhabit remains to be discovered. The Italians were the most skilful navigators of those days; and among the foreigners who had engaged in the Portugueze service was a Genoese by birth, named CHRISTOVAL COLON or CHRISTOPHER COLUMBUS, who, at the early age of fourteen, had betaken himself to a seafaring life, and had made considerable progress in geometry, cosmography and astronomy. His first voyage, after leaving the Mediterranean, appears to have been into the

northern seas, in which it is stated, in a memorandum written by himself, that he had visited Iceland, to which a considerable trade was then carried on, particularly by the northern nations and among others by England, principally on account of its valuable fisheries. It is even said that he proceeded beyond this island, and advanced several degrees within the polar circle, but on what service and for what purpose does not appear.* It would have been satisfactory to know whether it was a mere trading voyage, or a voyage of discovery, that led this celebrated navigator into those inhospitable regions; but there is little reason to hope that any further information will ever be obtained on this head. His subsequent grand discovery is too well known to be repeated, where it would be misplaced; but a word may be said on some recent attempts to rob this celebrated navigator of one of the greatest and most important discoveries recorded in the annals of navigation.

Doctor Robertson complains, and with a proper feeling for the honour of this great man, that some of the Spanish authors, with the meanness of national jealousy, have endeavoured to detract from the glory of his grand enterprize, by insinuating that he was led to the discovery of the new world, not by his own inventive or enterprizing genius, but by information which he had received from

* Life of Columbus.

some old pilot whose name or nation is not even mentioned, and that some German authors had ascribed the honour of the discovery of America to their countryman Martin Behaim, a native of Nuremberg. This early geographer studied under the celebrated John Muller, better known by the name of Regiomontanus. He accompanied Diego Cam in his voyage of discovery along the coast of Africa in 1483, and settled on the island of Fayal, where he established a colony of Flemings, having obtained a grant of it from the regent of Portugal. In 1492 he returned to Nuremberg, to visit his native country and family; and there made a map of the globe, which is still preserved in the library of that city. Of this map Dr. Robertson procured a copy, as published by Doppelmayer, from which, he observes, "the imperfection of cosmographical knowledge is manifest. Hardly one place is laid down in its true situation. Nor can I discover from it any reason to suppose that Behaim had the least knowledge of any region in America."* He states, indeed, that he delineates an island, to which he gives the name of St. Brandon; but that he suspects it to be a mere imaginary island which had been admitted into some ancient maps on no better authority than the legend of the Irish St. Brandon or Brendan, whose story is so childishly fabulous as to be unworthy of any notice; and he concludes that the account of his having discovered any part

* Robertson's Hist. of Amer. vol. i. p. 368.

of the new world appeared to him to be merely conjectural. Indeed it is most unlikely that such a discovery of Behaim either would or could be concealed; the éclat which attended that of Columbus is alone sufficient to disprove the pretensions set up for Behaim.

Though the map of Behaim was constructed from the writings of Ptolemy, Pliny and Strabo, and from the modern travels of Benjamin of Tudela, Carpini, Rubruquis, and especially of Marco Polo, yet the discoveries of the Portugueze had made no inconsiderable addition to the knowledge of the globe, and a grand step in progressive geography. His countrymen, however, not satisfied with what Behaim had sedulously collected and digested, have gone beyond the Spaniards in their attempt to rob Columbus of the honour of his discovery; and by fabricated documents to transfer the merit of it to Behaim. According to the pretensions set up by them, he not only made the discovery of that part of America which is now called Brazil, but anticipated Magelhanes in that of the strait which bears his name; nay, he even anticipated the intention of Magelhanes by naming the natives *Patagonians*, because the extremities of their bodies were covered with a skin which resembled the paws of a bear rather than the hands and feet of human beings;* all of which is

* "Our Captain-general, Magaglianes," says Pigafetta, "gave to these people the name of *Patagoni*—because they wore on their

extracted from pretended letters of Behaim himself, written in 1486, and preserved in the archives of Nuremberg; and from these, it would further appear, that "Martin Behaim, traversing the Atlantic ocean for several years, examined the American islands, and discovered the strait which bears the name of Magellan, before either Christopher Columbus or Magellan sailed those seas; whence he mathematically delineated, on a geographical chart, for the king of Lusitania, the situation of the coast around every part of that famous and renowned strait, long before Magellan thought of his expedition." It would require better support, than that they have hitherto met with, to make such clumsy fabrications pass current in the world.* It was not at all necessary for Columbus to receive any information from Behaim; he was too well acquainted with the nature of the sphere not to know that India could be approached by proceeding to the west as well as to the east, if no other land should be found to intervene; and it is quite evident, from all his endeavours to pass to the East Indies by a western route, that the continuity of the continent of America was entirely new to, and wholly unexpected by, him. His hope had been to find a direct passage to Cathay and Zipangu, names

feet the hairy skin of the guanaco, which gave them the appearance of bears' feet."

* Paper by Citizen Otto, in Amer. Phil. Trans. vol. ii. Nicholson's Journals, vol. ii. and iii. Sup. to Ency. Britt.

which, since the return of Marco Polo, had become "familiar as household words." It is true that the cosmographers of those days had carried China much beyond its real extent to the eastward, and, as Herrera observes, "the more it extended to the east, the nearer it must approach to the Cape de Verd islands." Columbus could not be ignorant of this; and indeed so much were the discoveries made by him considered as a part of Asia, that they had the name of the "Indies" immediately bestowed on them; and it became necessary, on detecting the mistake, to distinguish the two countries by the names of the East and the West Indies. And thus, as Major Rennel has justly observed, "the splendid discoveries of Columbus were prompted by a geographical error of most extraordinary magnitude."*

The whole story of Behaim's discovery seems to have had its origin in a passage of Pigafetta's narrative, which is certainly remarkable: "The Captain General (Magelhanes) knew that he must make his passage through a strait much concealed, as he had seen on a chart, in the depot of the king of Portugal, made by that most excellent man Martin de Boemia;" which might also receive an additional colour from the assertion of Herrera, that Magellan was in possession of a terrestrial globe, made by Behaim, to assist him in directing his course to the south seas; and that Columbus

* Geog. of Herodotus, p. 685.

was confirmed in his opinion of a western navigation by Martin de Bohemia, his friend.*

JOHN AND SEBASTIAN CABOTA. 1496.

JOHN CABOTA or CABOT, a citizen of Venice, came over to England with his son Sebastian, then a boy, (besides two other sons,) and settled in Bristol. Being a skilful pilot and intrepid navigator, Henry VII., disappointed in the hope of engaging Columbus, through the misfortunes of his brother Bartholomew, encouraged Cabota to make discoveries by granting him a patent, in virtue of which he had leave to go in search of unknown lands, and to conquer and settle them; the king reserving to himself one-fifth part of the profits. The patent bears date the 5th March, 1496, being the eleventh year of Henry's reign, and is granted to him by name, and to his three sons, Lewis, Sebastian, and Sancius. There is a sad disagreement in the date of the voyage in which Newfoundland is supposed to have been discovered; and there is no possible way of reconciling the various accounts collected by Hakluyt, and which amount to no less a number than six, but by supposing John Cabota to have made one voyage, at least, previous to the date of the patent, and some time between that and the date of the return of Columbus.†

* Herrera, Dec. i. See Burney's History of Voyages and Discoveries, vol. i. p. 3.

† *Either in the year* 1594 *or* 1595.

Neither is it quite clear that, in the voyage undertaken after the patent was signed, (whether in the same year, or the following,) the father accompanied Sebastian; for, if there be any truth in the report made to the Pope's legate in Spain, and printed in the collection of Ramusio, it would appear that Sebastian was alone on this voyage of discovery; as in this document Sebastian is thus made to say:—"and when my father died, in that time when news were brought that Don Christoval Colon,* the Genoese, had discovered the coasts of India, of which there was great talke in all the court of King Henry VII. who then reigned; insomuch that all men, with great admiration, affirmed it to be a thing more divine than humane to saile by the West into the East, where spices growe, by a way that was never known before: by his fame and report, there increaseth in my heart a great flame of desire to attempt some notable thing; and understanding by reason of the sphere that if I should saile by way of north-west I should by a shorter tract come into India, I thereupon caused the king to be advertised of my devise, who immediately commanded two caravels to bee furnished with all things appertayning to the voyage, which was, as farre as I remember, in the year 1496, in the beginning of summer; I

* This again is at variance with the patent of Henry, in which John is mentioned by name.

began therefore to sail toward the north-west, not thinking to find any other land than that of Cathay, and from thence to turn toward India; but after certaine dayes I found that the land ranne toward the north, which was to me a great displeasure. Nevertheless, sayling along by the coast to see if I could finde any gulfe that turned, I found the lande still continued to the 56 degree under our pole. And seeing that there the coast turned to the east, despairing to find the passage, I turned backe again, and sailed downe by the coast of that land toward the equinoctiall, (ever with intent to finde the saide passage to India,) and came to that part of this firme lande which is nowe called Florida, where my victuals failing, I departed from thence and returned into England, where I found great tumults among the people and preparations for warres in Scotland, by reason whereof there was no more consideration had to this voyage."*

The probability therefore is, that the father and son jointly, in their first voyage, discovered Newfoundland, to which they gave the name of *Prima Vista*, "the first seen." They describe the natives as being clothed in skins of beasts, and using, as arms, bows and arrows, clubs and pikes. They saw bears and large deer, caught plenty of seals, fine salmon, and soles above a yard in length; but

* Ramusio; and Hakluyt's voyages.

the fish in greatest abundance was of a kind called by the natives *baccallaos*, a name by which the country was afterwards known, and which a small island on the eastern side still bears. The Dutch and Germans have adopted the native name of the cod-fish, by changing the latter *l* into *j* and transposing the letters *b* and *c*, making the word *cabaljou*.

From an extract made by Hakluyt out of Fabian's Chronicle, it would appear that the Cabots brought home three of the natives of Newfoundland. "These savages were clothed in beasts' skins, and did eate raw flesh, and spake such speach that no man could understand them; and in their demeanour like to bruite beastes, whom the king kept a time after."

Sebastian Cabota finding, on his return from the discovery of America, that the English government was not disposed to prosecute the enterprize thus happily begun, set out for Spain; or, as Peter Martyr saith, "he was called out of England by the command of His Catholic Majesty of Castile, where he was made one of the council for the affairs of the New Indies;" and he adds, "Cabot is my very good friend, whom I treat with familiarity, and delight to have frequently to keep me company at my own house."

Sebastian made several voyages in the service of Spain, and among others discovered the Rio

de la Plata, or River of Silver, on the coast of Brazil. After this he returned to England, probably on the invitation of Mr. Robert Thorne, an English merchant of Bristol, but resident at Seville, with whom he was intimately acquainted, and who had contributed largely to one of his expeditions.* Mr. Thorne was a native, and once had served the office of mayor, of the city of Bristol, where Cabota's father had lived. His return to England was in the year 1548, when Henry VIII. was on the throne. On the succession of Edward VI. the Duke of Somerset introduced him to the young king, who was so delighted with his conversation that he created him, by patent, pilot major, and settled on him a pension for life of 500 marks (166*l.* 13*s.* 4*d.*) a year, "in consideration of the good and acceptable services done, and to be done."† Never was a reward, great as it was in those days, more deservedly bestowed. Placed at the head of the "Society of Merchant Adventurers," by his knowledge and experience, his zeal and penetration, he not only was the means of extending the foreign commerce of England, but, of keeping alive that spirit of enterprize, which, even in his life time, was crowned with success, and which ultimately led to the most happy results for the nation that had so wisely and honourably

* Lives of the Admirals, vol. i. p. 381.

† Hakluyt's Voyages.

Rymer's Fœdera, vol. xv. p. 181.

enrolled this deserving foreigner in the list of her citizens.

THE CORTEREALS. 1500.

The Portugueze, not content with having discovered a route to India by sailing round the tempestuous extremity of Africa, soon after engaged in an equally dangerous enterprize;—that of finding a route to India and the Spice islands, by sailing westward round the northern extremity of America.

This bold undertaking was reserved for the CORTEREALS, the enlightened disciples of the school of Sagres. The first navigator of the name of Cortereal, who engaged in this enterprize, was JOHN VAZ COSTA CORTEREAL, a gentleman of the household of the Infanta Don Fernando—who, accompanied by Alvaro Martens Homen, explored the northern seas, by order of King Alfonso the Fifth, and discovered the *Terra de Baccalhaos* (the land of cod fish) afterwards called Newfoundland.

This voyage is mentioned by Cordeiro,* but he does not state the exact date, which however is ascertained to have been in 1463 or 1464; for, on their return from the discovery of Newfoundland, or Terra Nova, they touched at the island of Terceira, the captaincy of which island having

* Historia Insulana, Cordeiro, 1 vol. fol.

become vacant by the death of Jacome Bruges, they solicited the appointment, and in reward for their services the request was granted, their patent commission being dated in Evora, 2d April, 1464.

Notwithstanding this early date of a voyage across the Atlantic, there exists no document to prove that any thing further was done by the Portugueze, in the way of discovery, till towards the close of the fifteenth century; and if the evidence of that in question rested on this single testimony of Cordeiro, and on the fact of the patent, it would scarcely be considered as sufficiently strong to deprive the Cabotas of the honour of being the first who discovered Newfoundland; at the same time if the patent should specify the service for which it was granted, and that service is stated to be the discovery of Newfoundland, the evidence would go far in favour of the elder Cortereal. But there is another indirect testimony afforded by Francisco de Souza,* who in 1570 wrote a treatise on the *New Islands*, and of their discovery; as also concerning those Portugueze who went from Vianna, and from the islands of the Azores, to people the *Terra Nova do Baccalhao* twenty years before that period; which would prove that the Portugueze not only were in the habit of fishing on the banks

* *Tratado das Ilhas novas, &c.* 1570. *Bibliotheca Lusitana.*

of Newfoundland, but of settling there also, towards the close of the fifteenth century.

The arduous enterprize of prosecuting discoveries in the northern seas would seem however to have been reserved exclusively for the family of the Cortereals; for it does not appear that any person had attempted, on the part of Portugal, to explore those seas navigated by John Vaz Cortereal, the father, nor by any nation, except Cabota in behalf of England, until the time of his son Gaspar Cortereal.

The two ships which had been prepared for this voyage, and put under his command, sailed from Lisbon in the summer of 1500—for although Galvam says that they sailed from the island of Terceira, this must only be understood on account of their having touched there to receive refreshments, to complete their crews, and to afford Cortereal an opportunity of taking leave of that part of his family which was settled in that island.

Departing from the Azores, or Western Islands, they steered a course which, as far as they knew, had never but once before been traced by any navigator, till they discovered land to the northward, to which they gave the name of *Terra Verde*—that is, Greenland. Galvam places it (although with little accuracy) in 50°*—and others, particularly

* Misprinted probably for 60°, which would be correct.

Goes, describe the qualities of the country, and the manners of the inhabitants.

In the first collection of voyages which is known to have been published in Europe, and printed in Vicenza, by Francazano Montaboldo,* there is inserted a letter from Pedro Pascoal, ambassador from the republic of Venice to the court of Lisbon, addressed to his brother in Italy, and dated 29th October 1501, in which he details the voyage of Cortereal, as told by himself on his return.

From this authority, it appears that, having employed nearly a year in this voyage, he had discovered, between west and northwest, a continent until then unknown to the rest of the world; that he had run along the coast upwards of eight hundred miles; that according to his conjecture this land lay near a region formerly approached by the Venetians,† almost at the North Pole; and that he was unable to proceed farther on account of the great mountains of ice which incumbered the sea, and the continued snows which fell from the sky.

He further relates that Cortereal brought fifty-seven of the natives in his vessels—he extols the country on account of the timber which it pro-

* Mundo Nuovo è Paesi nuovamente retrovati, &c. Vicenza, 1507; a very rare book; translated into Latin, by Madrignano, under the title of "Itinerarium Portugalensium è Lusitania in Indiam, &c."

† Nicolo and Antonio Zeno.

duces, the abundance of fish upon its coasts, and the inhabitants being robust and laborious.

To this evidence may also be added that of Ramusio, whose accuracy in such matters is well known. The following extract is taken from his discourse on Terra Firma and the Oriental Islands. "In the part of the new world which runs to "the northwest, opposite to our habitable con- "tinent of Europe, some navigators have sailed, "the *first* of whom, as far as can be ascertained, "was Gaspar Cortereal, a Portugueze, who arrived "there in the year 1500 with two caravels, "thinking that he might discover some strait "through which he might pass, by a shorter "voyage than round Africa, to the Spice islands.

"They prosecuted their voyage in those seas "until they arrived at a region of extreme cold; "and in the latitude of 60° north they discovered "a river filled with ice, to which they gave the "name of Rio Nevado—that is, Snow River: "They had not courage however to proceed farther, "all the coast which runs from Rio Nevado to "Porto das Malvas (Mallow Port) which lies in "56°, and which is a space of two hundred leagues, "was well peopled, and they landed and brought "away some of the inhabitants—Cortereal also "discovered many islands, all inhabited, and to "each of which he gave a name."* We shall presently see what islands these were.

* Ramusio, *Navigat. et Viaggi.*

This great country discovered by Cortereal is evidently that which at present is known under the name of Labrador, or rather Lavrador—a Portugueze word which characterises the inhabitants.

As a further proof that this is the fact, there is a map in an old edition of Ptolemy, published in Rome in 1508, which gives to the land of Lavrador the name of "Corterealis," and on it is laid down the island of Demonios (Demons) on account of the trouble which the ships had there experienced.

Sebastian Munster, in his Chorography, printed for the first time in Basle in 1544, gives to Newfoundland itself (Terra Nova) the name of Cortereal, and the celebrated Abraham Ortelius not only calls the land of Lavrador, *Cortereal*, but he marks the Rio Nevado, and Bahia da Serra, close to the entrance of the strait now named Hudson's; and he places nearly in the middle of it, a river which he calls Rio da Tormenta, (Storm River,) to which succeeds another bay called Bahia das Medas (Rick Bay.) It does not however follow that, because all these names are Portugueze, they must have first been given by Gaspar Cortereal, nor that he actually entered Hudson's Bay, though the probability is in favour of such a supposition, if we take into consideration all the collateral circumstances of the narrative.

The same doubt however does not occur in

regard to the river St. Lawrence. Even without specific evidence it might safely have been concluded that, as a passage to India was the grand object of research, so large an opening as is presented by the mouth of this river could not have escaped examination. Independent however of this general reasoning, the evidence furnished by Ramusio is decisive. In describing the principal places on that coast, he says that beyond Cabo do Gado (Cattle Cape) which is in 54 degrees, it runs two hundred leagues to the westward, to a great river called St. Lawrence, which some considered to be an arm of the sea, and which the Portugueze ascended to the distance of many leagues.

The extent of this navigation was probably limited to the ascertaining that it was not an arm of the sea, but a large river. As to the name of Canada, which was given to the country on the right of the entrance, it was by many geographers confined to a village situated at the confluence *of* the Seguenai, and according to most writers originated in the following circumstance:—When the Portugueze first ascended the river, under the idea that it was a strait, through which a passage to the Indies might be discovered—on arriving at the point where they ascertained that it was *not* a strait, but a river, they, with all the emphasis of disappointed hopes, exclaimed repeatedly, *Cà, nada!*—(here, nothing!) which words caught the

attention of the natives, and were remembered and repeated by them on seeing other Europeans, under Jacques Cartier, arrive in 1534—but Cartier mistakes the object of the Portugueze to have been gold mines, not a passage to India; and if the Portugueze account be true, he also mistook the exclamation of *Cà, nada,* for the name of the country.

It has been already stated that, in the course of this voyage, Cortereal discovered many islands, which he found were inhabited, and to which he gave Portugueze names. Ramusio, in his map, lays down the *Ilha dos Baccalhaos* (Cod Island) almost joining Terra de Cortereal; the island of *Boa Vista;* and another which he names "*Monte de Trigo*" (wheat heap or hill); and in the map of Ortelius there is laid down, in lat. 43°, *Ilha Redonda* (Round Island); in lat. 47°, *Ilha da area* (Sand Island); and in lat. 57°, *Ilha dos Cysnes* (Swan Island); and, finally, in the mouth of Hudson's Straits, he places a little islet under the name of *Caramilo*—from which it may almost be concluded that the Portugueze had been here also, as this name is only a mis-spelling of the Portugueze word Caramelo or Icicle.

These circumstances render it probable that during the enthusiasm excited by the voyages of Gama and of Magalhanes, other voyages were undertaken, and countries described, by the Portugueze, which subsequent events caused to be neglected and forgotten.

As Gaspar Cortereal was fully persuaded that a north-west passage to India might be found, and that its discovery would be honourable to himself and highly advantageous to his country, he continued his preparations for a second expedition, to which he had no difficulty in obtaining the king's consent; and he sailed, accompanied by the anxious prayers and hopes of his countrymen, from the port of Lisbon, on the 15th of May, 1501, with two vessels.

The voyage is said to have been prosperous until they reached Terra Verde; but here he was separated by bad weather from his consort, who, after having long searched and waited for him in vain, returned to Lisbon, with the melancholy tidings of what had happened. It is stated, in several of the collections of voyages, that the name of *Anian* was given to the Strait supposed to have been discovered by Gaspar, in honour of two brothers who accompanied him; but there are no grounds whatever for such a supposition, nor for that of other geographers who pretend that the name of *Ania*, as applicable to the north-western extremity of America, is mentioned by Marco Polo as a province of China, there being no such province in China, nor any such mentioned by Marco Polo. The origin of the word is, in fact, utterly unknown.*

* In the earliest maps *Ania* is marked as the name of the north-western part of America. *Ani* in the Japanese language is said to signify *brother*; hence probably the mistake.

Michael Cortereal, grand door-keeper of the king Don Manuel, seeing himself thus deprived of a brother for whom he entertained the warmest affection, would not entrust the task of sending in search of him to any other, and therefore he himself set sail with three vessels from Lisbon, on the 10th of May, 1502.

Antonio Galvam informs us that, upon their reaching the coast, they discovered many rivers and openings, and each vessel entered a separate one, with the understanding that they should all meet at a certain point on the 20th of August. Two of the vessels did so meet, but Miguel de Cortereal did not appear, nor was any thing more ever heard of him; and the only memorial of his and his brother's fate is the name of *Cortereal* given to the country.

When these two vessels returned to Lisbon with the melancholy news of the loss of this second Cortereal, there remained yet a third brother, Vasco Eanes, master of the household, and one of the privy council of king Don Manuel, who immediately prepared to set out in search of his lost brothers; but no entreaty, no influence, could obtain the king's consent, who constantly replied that in this undertaking he had already lost two of his most faithful servants and valuable friends, and was resolved at least to preserve the third; he very readily, however, granted leave for other vessels being prepared and dispatched on this

search; but they also returned without any intelligence of these unfortunate navigators.

Notwithstanding these disasters, those voyages were nevertheless productive of great advantages to Portugal: they led to the establishment of a settlement on Newfoundland and to the prosecution of very extensive fisheries, in which were employed, at one period, between two and three hundred vessels from the ports of Vianna and Aveiro alone. But when Portugal had passed under the dominion of Spain, her commerce languished and her marine was destroyed, from the combined effect of domestic oppression and foreign war; and the ports both of Aveiro and Vianna are at present, and have been for many years, by sheer neglect, nearly choaked with sand and mud, and can no longer receive vessels of burthen.

The family of Cortereal has long been extinct, but it was for many years one of the most distinguished in Portugal. The family name was originally Costa or Coste, and of French extraction, having come to Portugal along with the Count Alfonso Henriquez, under whom one of the Costas served in the taking of Lisbon and conquering of Portugal from the Moors.

The family settled in Algarve; and when John Vaz da Costa (some say his father) came to the Portugueze court, he used to live in such a style of splendour and hospitality, that the king observed to him, " Your presence, Costa, in my court,

makes it a *real court.*" Others say, that it was not on account of his magnificent style of living, but of his personal prowess on a particular occasion. Two strangers having appeared at court, and, according to the manners of the times, challenged any of the courtiers to wrestle or combat, Cortereal immediately accepted the challenge, and civilly shook hands with his antagonist before the contest; but so prodigious was the strength of Cortereal (until then called Costa) that he squeezed the stranger's hand until he cried out, in the greatest pain, that he could not attempt to contend with a man possessed of such extraordinary strength; on which occasion the king is represented as being so delighted, that he exclaimed, "Truly, Costa, your presence makes my court a *real court.*"*

* Mém. de Littérat. Portug. vol. viii. Lisbon, 1812. An Essay, by Sebastuò Francisco Mendez Trigozo.

CHAPTER II.

DISCOVERIES MADE IN THE NORTH DURING THE SIXTEENTH CENTURY.

Aubert and Jacques Cartier—Estevan Gomez—The Dominus Vobiscum—The Trinitie and the Minion—Sir Hugh Willoughby—Richard Chancellor and Stephen Burrough—Sir Martin Frobisher—Edward Fenton—Arthur Pit and Charles Jackman—Sir Humphrey Gilbert—John Davis—Maldonado—Juan de Fuca—Barentz—William Adams.

AUBERT AND JACQUES CARTIER. 1508 and 1534.

THE French may almost be said to be the only maritime people of Europe who have seen, with apparent indifference, the exertions made by other nations for the discovery of a passage to India, either by the north-east or the north-west. Yet they very early availed themselves of the discoveries of others: for we find the Normans and Bretons, at the commencement of the sixteenth century, frequenting the banks of Newfoundland for the purpose of fishing; and one of their navigators, named AUBERT or HUBERT, sailed from Dieppe in 1508, in a ship called the Pensée, with the view, as it would seem, to examine the shores

of Newfoundland, from whence he brought back to Paris one of the natives; but it does not appear that any further discovery was the object of this voyage. Perhaps, however, the expedition of JACQUES CARTIER in 1534, under the auspices of Francis I., might be called a voyage of discovery, undertaken with the view of finding a short route to those countries, from which Spain derived so much wealth. The discovery he actually made, or at least claimed, was that of the gulf and river of Saint Lawrence; though there can be little doubt that Cortereal preceded him, and indeed it is generally supposed that even Velasco had been before him. The etymology of the word Canada (already noticed*) has ever been ascribed to the visit of Velasco, with as little accuracy perhaps as that which had before been assigned by Cortereal. It is stated that the former, disappointed in not finding any of the precious metals, in hastening to return, called out to his people *Aca nada*, "there is nothing here," which words being repeated by the natives to the next Europeans they saw, it was concluded that *Canada* was the name of the country; but both may probably be thought too forced and fanciful to be real. Cartier, in the narrative of his second voyage up the St. Lawrence in 1535, gives a more probable derivation of the name, when he says that an assemblage of houses or a town is called

* *Under Art.* "Cortereal."

canada in the language of the natives—ilz appellent une ville, *Canada.**

The subsequent voyages of Roberval and of the Marquis de la Roche had no other object of discovery than that of gold, or of finding out a desirable spot to establish a colony on the coast of America; and though they contain many very curious and interesting transactions with the native Indians, they come not within the scope of the present history, which is meant to be confined to the more northern regions. We hasten, therefore, to those brilliant periods of early English enterprize, so conspicuously displayed in every quarter of the globe; but in none, probably, to greater advantage, than in those bold and persevering efforts to pierce through frozen seas, in their little slender barks of the most miserable description, ill provided with the means either of comfort or safety, without charts or instruments, or any previous knowledge of the cold and inhospitable regions through which they had to force and to feel their way; their vessels oft beset amidst endless fields of ice, and threatened to be overwhelmed with instant destruction from the rapid whirling and bursting of those huge floating masses, known by the name of ice-bergs: yet, so powerfully infused into the minds of Britons was the spirit of

* In *his vocabulary of the language he calls a town* "Canada."—Hakluyt, vol. iii. p. 232.

enterprize, that some of the ablest, the most learned, and most respectable men of the times, not only lent their countenance and support to expeditions fitted out for the discovery of new lands, but strove eagerly, in their own persons, to share in the glory and the danger of every daring adventure.

In point of time, however, there is one solitary voyage on record, though the particulars of it are so little known as almost to induce a suspicion whether any such voyage was ever performed, which takes precedence of any foreign voyage on the part of English navigators; it is that of a Spaniard, or rather perhaps, judging from the name, of a Portugueze, for the discovery of a northern passage to the Moluccas; and still more probably a Portugueze, from the circumstance of his having accompanied Magelhanes on his voyage into the south seas round the southern extremity of the continent of America. The following vague account is all that can now be collected of Estevan or Steven Gomez.

ESTEVAN GOMEZ. 1524.

The attempts which had been made by John and Sebastian Cabota on the part of England, by Corterеal on that of Portugal, and by Aubert or Hubert, who was sent out by the French, to prosecute discoveries in the north, very naturally alarmed the jealousy of the Spaniards, who, on

account of their rich and valuable possessions in the east, were the most interested in confining the way to them to that, which should be as intricate and difficult as possible. The two grand routes to those possessions, which the two Portugueze, Vasco de Gama and Magelhanes, had succeeded in discovering, were, it is true, both long and tedious, and, in those early periods of navigation, not altogether free from danger. That circumstance alone might not, therefore, have been sufficient to excite investigation on the part of Spain, if she had not witnessed other nations attempting to discover a shorter way to China and the Indies by the north. It would have argued the extreme of indifference, if the nation most interested in the speedy intercourse with the wealthy countries of the east should have been the most backward in profiting by those discoveries already made, and which augured such happy results. Accordingly we find that in the year 1524, Estevan Gomez, a supposed skilful navigator, employed on the part of Spain, sailed from Corunna with a view of discovering a northern passage to the Molucca islands from the Atlantic. This Gomez, as before mentioned, had sailed with Magelhanes on his voyage of discovery into the south seas. He was therefore personally acquainted with the difficulties and delays of a passage by that route, and capable of estimating the comparative advantages of one round the northern extremity of America. But to what part of the coast

of America, or Newfoundland, or Labrador, he directed his course is not at all known. It is evident, however, that he returned without bringing back with him any hope of a passage into the eastern seas, having contented himself with seizing and bringing off some of the natives of the coast on which he had touched. It is said, that one of his friends, accosting him on his return, inquired with eagerness what success he had met with, and what he had brought back; to which Gomez replying shortly *esclavos* (slaves), the friend concluded he had accomplished his purpose, and brought back a cargo of cloves (*clavos*). "On this," says Purchas, "he posted to the court to carry the first news of this spicy discovery, looking for a great reward; but the truth being known, caused hereat great laughter."*

Gaspar, in his history of the Indies, is the only authority for this voyage, of which and of Steven Gomez, as Purchas has observed, "little is left us but a jest."

The Spaniards were not less alarmed on the side of the Pacific than they were at home. Cortez, the conqueror and viceroy of Mexico, had received intelligence of the attempt of Cortereal to discover a northern passage from the Atlantic into the Pacific, and of his having entered a strait, to which he gave the name of Anian. Alive to the importance of the intelligence, he lost not a mo-

* Purchas his Pilgrimage, vol. v. p. 810.

ment in fitting out three ships well manned, of which he is said to have taken the command in person, though nominally under the orders of Francisco Ulloa, to look out for the opening of this strait into the Pacific, and to oppose the progress of the Portugueze and other Europeans who might attempt this passage. Little is known concerning this expedition of Cortez, but that it soon returned without meeting with Cortereal, or discovering any thing that could lead to the supposition of a passage from those seas to the Atlantic.

The Spaniards, however, were by no means easy at the attempts, feeble as they had hitherto been, to reach the Pacific by a northern route. Accordingly, in 1542, the viceroy Mendoza sent Coronado by land and Alarçon by sea to the northward from Mexico, to inquire into and, if possible, to discover the strait of Anian, which was then supposed to be the western opening of the passage into the Pacific; but both expeditions returned without having effected any discovery that could lead to the supposition of the existence of such a passage being well grounded.

The court of Spain were by no means satisfied with such negative testimonies, and gave orders, two years afterwards, for another expedition, the conduct of which was entrusted to Juan Rodriguez de Cabrillo, a Portugueze in the service of Spain. He proceeded along the north-west coast of America as far as the latitude 44°, and

gave the name of Cape Mendocino, in compliment of the viceroy, to the land seen about the latitude 42°. The want of provisions, the sickness of the crew, the weakness of the ship, the turbulent sea, and the cold weather, were assigned as the reasons for their return, without proceeding to a higher degree of latitude; and it may well be a subject of wonder, that this enterprizing nation, the first which was firmly established on the coasts and islands of the Pacific, should have been the last to make discoveries in that part of the world.

THE DOMINUS VOBISCUM. 1527.

We ought, perhaps, to be less surprized at the indifference shewn for northern discovery by the maritime nations of Europe, when we find that, notwithstanding the liberal encouragement given by Henry VII. and his successor Edward VI., to Sebastian Cabota, the spirit of enterprize seems to have lain dormant in England for thirty years nearly; at least no memorial of any voyage undertaken either for profit or discovery is left on record during that period. In fact, the real spirit of adventure had not yet stimulated the mercantile part of the nation to engage in foreign trade or to make discoveries; and so little impression had the exploits of Cabota and his suggestions for following them up made on the minds of the people of England, or of the government, that this great pilot

seems to have left the country in disgust, and entered into the service of Spain; from whence he was probably drawn, in the reign of Edward VI., on promise of the pension already mentioned, or, in general terms, of the king's patronage. It would seem, indeed, that although the prowess of English seamen had oft-times been displayed in contests on their native element with their continental neighbours, in "carrackes, barges and balyngers," the kings of England, or their counsellors, were not yet aware of the great advantages of foreign trade and foreign enterprize towards the formation of a military marine. There is, however, a document preserved in Hakluyt's collection, in the shape of a poem, complaining of the neglect of the navy in the time of Henry VI., and extolling "the policee of keeping the see in the time of the marveillous werriour and victorious prince, King Henry the Fift, and of his grete shippes."

"When at Hampton, he made the *Great Dromons*,
Which passed other grete shippes of the Commons,
The *Trinitie*, the *Grace de Dieu*, the *Holy Ghost*
And other moe, which as now be lost,
What hope ye was the king's grete intent,
Of thoo shippes, and what in mind he meant.
It was not ellis, but that he cast to bee
Lord Round-about, environ of the see."*

At length, however, the spirit of discovery and foreign enterprize burst forth in the reign of Henry

* English Policie exhorting all England to keepe the see, &c.—Hakluyt, vol. i, p. 187.

VIII.; and flourished in full vigour under the fostering hand of Elizabeth. The first enterprize undertaken solely by Englishmen, of which we have any record, was at the suggestion of Master Robert Thorne, of Bristol, who is said to have exhorted King Henry VIII. "with very weighty and substantial reasons to set forth a discoverie even to the North Pole," which voyage, as would appear from the Chronicles of Hall and Grafton, actually took place; for they inform us that "King Henry VIII. sent two faire ships well manned and victualled, having in them divers cunning men to seek strange regions, and so they set forth out of the Thames the 20th day of May, in the 19th yeere of his raigne, which was the yere of our Lord 1527."* Hakluyt took great pains to discover who these cunning men were, but all he could learn was that one of the ships was called the DOMINUS VOBISCUM, and that a canon of St. Paul's, in London, a great mathematician and wealthy man, went therein himself in person; that having sailed very far north-westward, one of the ships was cast away on entering into a dangerous gulph, about the great opening between the north parts of Newfoundland and Meta incognita or Greenland, and the other returned home about the beginning of October: "and this," says Hakluyt, "is all that I can hitherto learne or finde out of this voyage, by reason of the great negligence of

* Chronicles quoted by Hakluyt, vol. iii. p. 129.

the writers of those times, who should have used more care in preserving of the memories of the worthy actes of our nation."*

THE TRINITIE AND THE MINION. 1536.

This voyage, we are told by Hakluyt, was set forth by Master Hore, of London, "a man of goodly stature and of great courage, and given to the studie of cosmographie." Assisted by the king's favour, several gentlemen were encouraged to accompany him in a voyage of discovery upon the north-west parts of America, many of whom were of the Inns of Court and of Chancery; "and divers others of good worship, desirous to see the strange things of the world. The whole number that went in the two tall ships were about sixe-score persons, whereof thirty were gentlemen, which were all mustered in warlike maner at Gravesend, and after the receiving of the sacrament they embarked themselves in the ende of Aprill, 1536."†

After a tedious passage of two months they reached in safety Cape Breton; and shaping a course from thence to the north-east came to Penguin island, "very full of rocks and stones, whereon they went and found it full of great

* Hakluyt's Voyages, vol. iii. p. 129.
† Idem.

foules white and gray, as big as geese, and they saw infinite numbers of their egges." These birds they skinned and found to be good and nourishing meat, and the great store of bears, both black and white, was no mean resource, and, as we are told, no bad food.

Mr. Oliver Dawbeney, merchant of London, who was one of the adventurers on board the MINION, related to Mr. Richard Hakluyt the following curious circumstances concerning this early voyage:

"That after their arrivall in Newfoundland, and having bene there certaine dayes at ancre, and not having yet seene any of the naturall people of the countrey, the same Dawbeney walking one day on the hatches spied a boate with savages of those parts, rowing downe the bay toward them, to gaze upon the ship and our people, and taking vewe of their comming aloofe, he called to such as were under the hatches, and willed them to come up if they would see the natural people of the countrey, that they had so long and so much desired to see: whereupon they came up and tooke viewe of the savages rowing toward them and their ship, and upon the viewe they manned out a ship-boat to meet them and to take them. But they spying our ship-boat making towards them, returned with maine force and fled into an island that lay up in the bay or river there, and our men pursued them into the island and the savages fledde and escaped;

but our men found a fire and the side of a beare, on a wooden spit, left at the same by the savages that were fled.

"There, in the same place, they found a boote of leather, garnished on the outward side of the calfe with certaine brave trailes, as it were of rawe silke, and found a certaine great warme mitten. And these caryed with them, they returned to their shippe, not finding the savages, nor seeing any thing else besides the soyle, and the things growing in the same, which chiefly were store of firre and pine trees.

"And further the said Mr. Dawbeney told him, that lying there they grew into great want of victuals, and that there they found small reliefe, more than that they had from the nest of an osprey, that brought hourely to her yong great plentie of divers sorts of fishes. But such was the famine that encreased amongst them from day to day, that they were forced to seeke to relieve themselves of raw herbes and rootes that they sought on the maine: but the famine encreasing, and the reliefe of herbes being to little purpose to satisfie their insatiable hunger, in the fieldes and deserts here and there, the fellow killed his mate while he stooped to take up a roote for his reliefe, and cutting out pieces of his bodie whom he had murthered, broyled the same on the coles and greedily devoured them.

"By this meane the company decreased, and

the officers knew not what had become of them; and it fortuned that one of the company, driven with hunger to seeke abroade for reliefe, found out in the fieldes the savour of broyled flesh, and fell out with one for that he would suffer him and his fellowes to sterve, enjoying plentie as he thought; and this matter growing to cruell speaches, he that had the broyled meate burst out into these wordes:—If thou wouldest needes know, the broyled meate I had was a piece of such a man's buttocke. The report of this brought to the ship, the captaine found what became of those that were missing, and was perswaded that some of them were neither devoured with wilde beastes nor yet destroyed with savages: and hereupon he stood up and made a notable oration, containing howe much these dealings offended the Almightie, and vouched the Scriptures from first to last what God had, in cases of distresse, done for them that called upon him, and told them that the power of the Almighty was then no lesse, then in al former time it had bene. And added, that if it had not pleased God to have holpen them in that distresse, that it had been better to have perished in body, and to have lived everlastingly, then to have relieved for a poore time their mortal bodyes, and to be condemned everlastingly both body and soule to the unquenchable fire of hell. And this having ended to that effect, he began to exhort to repentance, and besought all the company to pray.

that it might please God to look upon their present miserable state, and for his owne mercie to relieve the same. The famine encreasing, and the inconvenience of the men that were missing being found, they agreed amongst themselves, rather than all should perish, to cast lots who should be killed; and such was the mercie of God, that the same night there arrived a French ship in that port, well furnished with vittaile, and such was the policie of the English that they became masters of the same, and changing ships and vittailing them they set sayle to come into England.

"In their journey they were so farre northwards, that they saw mighty islands of yce in the sommer season on which were hawkes and other foules to rest themselves being weary of flying over farre from the maine. They sawe also certaine great white foules with red bils and red legs, somewhat bigger than herons, which they supposed to be storkes. They arrived at S. Ives in Cornewall about the ende of October, from thence they departed unto a certain castle belonging to Sir John Luttrell, where M. Thomas Buts, and M. Rastall, and other gentlemen of the voyage, were very friendly entertained; after that they came to the Earle of Bathe at Bathe, and thence to Bristol, so to London. M. Buts was so changed in the voyage with hunger and miserie, that Sir William his father, and my Lady his mother, knew him not to be their soune, until they found a secret mark,

which was a wart, upon one of his knees, as he told me, Richard Hakluyt of Oxford, himselfe; to whom I rode 200 miles to learn the whole trueth of this voyage from his own mouth, as being the onely man now alive that was in this discoverie.

"Certaine months after, those Frenchmen came into England, and made complaint to king Henry the VIII.; the king, causing the matter to be examined, and finding the great distresse of his subiects and the causes of dealing so with the French, was so mooved with pitie, that he punished not his subiects, but of his owne purse made full and royall recompence unto the French.

"In this distresse of famine, the English did somewhat relieve their vitall spirits, by drinking at the springs the fresh water out of certaine wooden cups, out of which they had drunke their aqua-composita before."*

SIR HUGH WILLOUGHBY. 1553.

The attention of the merchants of England engaged in foreign trade appears to have chiefly been confined to the Flemish towns, the island of Iceland, and to a limited fishery on the banks of Newfoundland, during the first half of the six-

* Hakluyt, vol. iii. p. 130.

teenth century. But the return of Sebastian Cabota, and the knowledge of his great enterprizes in the service of Spain, infused into the minds of the merchants of England that spirit of enlarged adventure which had but feebly shewn itself at the commencement of the century, and then confined to one quarter of the globe. The reputation of this able navigator was so firmly established on his return to England that, in addition to the liberal pension granted to him by Edward VI., he was constituted Grand Pilot of England, and "Governour of the mysterie and companie of the marchants adventurers for the discoverie of regions, dominions, islands and places unknowen." It was at his suggestion that a voyage was undertaken in the year 1553 for the discovery of a north-east passage to Cathaia; and the ordinances and instructions drawn up by him on this occasion are such as do him infinite honour; not only for the chaste style in which they are written, but also for the liberal and enlightened sentiments which run throughout this early performance.*

The ships fitted out for this expedition of discovery were the *Bona Esperanza*, Admiral of the fleet, of the burden of 120 tons, having with her a

* *Ordinances, Instructions, &c.* by *M. Sebastian Cabota, Esquier.* Hakluyt, vol. i. p. 226.

pinnace and a boat; and Sir Hugh Willoughby, Knight, as Captain General of the fleet, was appointed to command her: the *Edward Bonadventure*, of 160 tons, with a pinnace and a boat, the command of which was given to Richard Chancelor, Captain and Pilot-Major of the fleet, and Steven Burough was master of the ship: and the *Bona Confidentia* of 90 tons, having also a pinnace and a boat, of which Cornelius Durfoorth was master. The number of persons in the first ship was thirty-five, including six merchants; in the second fifty, including two merchants; and in the third twenty-eight, including three merchants.

This first regular expedition for discoveries excited the most lively interest at the court and in the capital; and so sanguine were the promoters of the voyage of its success in reaching the Indian seas, that they caused the ships to be sheathed with lead as a protection against the worms which, they had understood, were destructive of wooden sheathing in the Indian climates,* and these are probably the first ships that in England were coated with a metallic substance.† From the account of the

* Clement Adams's account of the voyage. Hakluyt, vol. i. p. 243.

† Sheathing with lead was in use till the reign of Charles II. but was discontinued on account of its wearing away irregularly and so soon washing bare in places, as to let in the worms; and sheathing with wood was adopted in its place. In 1708, a proposal was made to the Navy Board to sheath ships with copper,

voyage written by Clement Adams, "schoolemaster to the Queene's henshmen," it would appear that several persons of great experience were candidates for the command, but that Sir Hugh Willoughby, a valiant gentleman and well born, was preferred before all others, "both by reason of his goodly personage (for he was of tall stature) as also for his singular skill in the services of warre." On the day appointed for the sailing of the expedition from Ratcliffe, which was the 20th May, "they saluted their acquaintance, one his wife, another his children, and another his kinsfolkes, and another his friends deerer than his kinsfolkes;" after which the ships dropped down to Greenwich, where the court then was. The great ships were towed down by the boats, "the marriners being all apparelled in watchet or skie-coloured cloth. The courtiers came running out and the common people flockt together, standing very thicke upon the shoare; the Privie Consel, they lookt out at the windowes of the court, and the rest ranne up to the toppes of the towers; the shippes hereupon discharge their ordinance, and shoot off their pieces after the maner of warre, and of the sea, insomuch

which was rejected without a trial. About sixty years after it obtained a trial and was favourably reported on—yet, so very difficult is the introduction of any thing new, that, ten years after this experiment, in Admiral Keppel's fleet, there was but one line of battle ship that was coppered.—*M. S. Memoirs of the Navy.*

that the tops of the hills sounded therewith, the valleys and the waters gave an echo, and the mariners they shouted in such sort, that the skie rang againe with the noise thereof."*

The result of this voyage, which held out such fair promises, was most disastrous to the gallant Sir Hugh Willoughby and his brave associates; who, with the whole of the merchants, officers and ship's company, as well as those of the Bona Confidentia, to the number of seventy persons, perished miserably from the effects of cold or hunger, or both, on a barren and uninhabited part of the eastern coast of Lapland, at the mouth of a river called *Arzina*, not far from the harbour of *Kegor*. The ships and the dead bodies of those who thus perished were discovered the following year by some Russian fishermen; and by some papers found in the admiral's ship, and especially by the date of his Will, it appeared that Sir Hugh Willoughby and most of the company of the two ships were alive in January 1554. They had entered the river on the 18th of September preceding. No papers, however, were ever published to give the least account of their proceedings and sufferings, which is somewhat singular; as even common seamen, English, Dutch and Russians, who, at various times, have wintered in much higher latitudes, have kept regular journals of their proceedings. That of Sir Hugh is exceed-

* *Clement Adams.* Hakluyt, vol. i. p. 245.

ingly meagre, terminates just after their arrival in the Arzina, and contains only the following paragraph respecting their distressed situation.

"Thus remaining in this haven the space of a weeke, seeing the yeere farre spent, and also very evill wether, as frost, snowe and haile, as though it had been the deepe of winter, we thought it best to winter there. Wherefore we sent out three men south south-west, to search if they could find people, who went three dayes journey, but could finde none. After that we sent other three westward four dayes journey, which also returned without finding any people. Then sent we three men south-east three dayes journey, who in like sorte returned without finding of people or any similitude of habitation."*

"It is singular," says Mr. Pennant, "that so very little has been preserved concerning that very illustrious character, Sir Hugh Willoughby. It appears that he was son of Sir Henry Willoughby, Knight and Baronet, by his third wife Elen, daughter of John Egerton, Esq. of Wrine Hall in Cheshire. Sir Hugh married Jane, daughter of Sir Nicholas Shelley, of Shelley, in the county of Nottingham, Knight; by her he had a son named Henry, of whom I do not find any account. They were originally of Riseley in Derbyshire; Sir Hugh is styled by Camden, of Riseley. They

* *Sir H. Willoughby's note.* Hakluyt, vol. p. 236.

changed their residence to Wollaton in Nottinghamshire, the princely and venerable seat of Lord Middleton, who acquired it by the marriage of his ancestor, Sir Perceval Willoughby, with Brigitta, daughter and sole heiress of Sir Francis Willoughby, founder of that noble pile. The portrait of the celebrated Sir Hugh is to be seen there; a whole length, in very large breeches, according to the fashion of the times, in a room hung with velvet, with a table covered with velvet, and a rich carpet. From his meagre appearance, the servant tells you that it represents the attitude in which he was found starved. This trivial account is all that is left of so great a name."*

A better fortune attended Master Richard Chancelor, in the Edward Bonaventure, who succeeded in reaching Wardhuys, in Norway, the appointed rendezvous of the little squadron. Here he waited seven days looking in vain for his consorts, and was preparing to depart, when meeting with "certaine Scottishmen" they earnestly attempted to dissuade him from the further prosecution of the voyage, magnifying the danger, and using every effort to prevent his proceeding; but he was not to be discouraged with "the speeches and words of the Scots," and resolutely determined "either to bring that to passe which was intended, or els to die the death." Accordingly, on setting

* Pennant's Arct. Zool. Sup. p. 32.

out again, "he held on his course towards that unknowen part of the world, and sailed so farre that hee came at last to the place where hee found no night at all, but a continuall light and brightnesse of the sunne shining clearly upon the huge and mighty sea." At length he entered into a very great bay, and seeing a fishing-boat, enquired of the people "what country it is, and what people, and of what maner of living they were;" but these men seeing the large ship were greatly alarmed and fled. At last, however, they were overtaken, and immediately fell on their knees, offering to kiss Master Chancelor's feet. The report being spread abroad of the arrival of a strange people "of singular gentlenesse and courtesie," the inhabitants brought them presents of provisions and entered readily and *fearlessly into* trade with them.

Our navigators now learned that the name of the country was Russia or Moscovie, and that of their king Juan Vasilovich, who "ruled and governed farre and wide in those places." A negociation speedily commenced, the result of which was a journey, undertaken and performed by Master Chancelor, of nearly fifteen hundred miles, to a city called Mosco, where he was well received; and to his discreet and able representations England is indebted for the firm foundation of that commerce with Russia, which has continued almost without interruption ever since.

The first interview with the Czar of Mosco is extremely interesting and curious. These adventurers were received with every mark of distinction, and invited to a splendid entertainment, at which were present the Czar and all his nobles. The display of gold and silver, the jewels and the rich robes, perfectly astonished the English travellers. The emperor kept them at great distance; but Chancelor saluted him only in the manner of the English court. On the second visit the Czar was more familiar. "The prince called them to his table to receive each a cup from his hand to drinke, and took into his hand Master George Killingworth's beard, which reached over the table, and pleasantlie delivered it the Metropolitane, who, seeming to blesse it, saide in Russ, 'this is God's gift;' as indeed at that time it was not only thicke, broad, and yellow coloured, but in length five foote and two inches of assize." Shortly after this he was dispatched with a proper escort to Archangel, with a letter from the Czar addressed to Edward VI., and sailing from thence the following spring arrived safely in England.

RICHARD CHANCELOR, AND STEVEN BUROUGH. 1555 and 1556.

The return of CHANCELOR to England with a letter from the Czar Vasilovich addressed to Ed-

ward VI., and the prospects of vast profits which a trade with this extensive empire held forth, were deemed to have amply compensated the melancholy fate of Sir Hugh Willoughby, the supposed loss of the two ships, and the failure of the expedition in its main object; and Philip and Mary, who were now on the throne, were readily prevailed on to grant a new charter "to the community of merchants adventurers," and to appoint Sebastian Cabota governor thereof for the term of his natural life. A commission was also issued, constituting Richard Chancelor, George Killingworth, and Richard Gray commissioners from Philip and Mary, to carry a letter to, and to treat with, the Czar of Moscovie concerning the commercial priveleges and immunities which he might be pleased to grant to this newly chartered company. The *Edward Bonaventure* and the *Philip and Mary* were the ships appointed to carry out the commissioners, who, on their arrival at Archangel, were escorted to Mosco, where they were well received, and, we are told, made a profitable voyage. But though commerce was the immediate, it was not the only, object of this second expedition. By an article of their instructions the adventurers were particularly directed "to use all wayes and meanes possible to learne howe men may passe from Russia, either by land or by sea, to Cathaia." And so anxious was the company to follow up the attempt at a north-east passage to the Indian seas, that, without

waiting the result of Chancelor's second voyage, it was determined to fit out a small vessel the next year, 1556, to make discoveries by sea to the eastward; and STEVEN BURROWE or BUROUGH was appointed to command the *Serchthrift* pinnace fitted out for this purpose. On the 27th April, being then at Gravesend and ready for sea, the governor, accompanied with several gentlemen and ladies, paid a visit to the ship, "and the good olde gentleman Master Cabota gave to the poore most liberall almes; and then, at the signe of the Christopher, hee and his friends banketted, and made mee and them that were in the company great cheere; and for very joy that he had to see the towardness of our intended discovery, he entered into the dance himselfe, amongst the rest of the young and lusty company." They left Gravesend on the 29th; on the 23d May passed the North Cape, so named on the first voyage, and on the 9th June entered the river *Cola*, and determined its latitude to be 65° 48′ N.

One of the numerous Russian vessels called *lodias*, under the orders of one Gabriel, being bound for *Petchora*, led the way for the Serchthrift with great attention and civility until they came to that river, which they reached on the 15th July. In proceeding to the eastward they fell in with much ice, in which they were enclosed before they were aware of it, and "which was a feareful sight to see." In latitude 70° 15′ they again encountered

heaps of ice. But on the 25th they fell in with an object which seems to have inspired greater terror even than the ice. It was the first whale that our navigators had met with, and the impression it made on the crew is rather amusing. "On St. James his day, bolting to the windewardes, we had the latitude at noon in seventy degrees, twentie minutes. The same day, at a south-west sunne, there was a monstrous whale aboord of us, so neere to our side that we might have thrust a sworde or any other weapon in him, which we durst not doe for feare hee should have overthrowen our shippe; and then I called my company together, and all of us shouted, and with the crie that we made he departed from us; there was as much above water of his backe as the bredth of our pinnesse, and at his falling downe he made such a terrible noise in the water, that a man would greatly have marvelled, except he had known the cause of it; but, God be thanked, we were quietly delivered of him."*

The same day they came to an island which they named *James's Island.* Here they met with a Russian who had seen them at Cola, and who told them that the land a head of them was called *Nova Zembla,* or the New Land. On the 31st they reached the island of *Weigats.* Here they had intercourse with several Russians, and learned

* Hakluyt's English Voyages, vol. i. p. 280.

from them that the people who inhabited the great islands were called *Samoeds*, who have no houses but tents made of deer's skins. On landing they observed a heap of Samoeds' idols, at least three hundred in number, in the shape of men, women, and children, "very grossly wrought, and the eyes and mouth of sundrie of them were bloodie." Some of them are described as being "an olde sticke with two or three notches."

They remained near this place till the 23d August, without being able to get farther to the eastward on account of the constant north-east and northerly winds, thick weather, and abundance of ice; and on the 10th September they arrived at *Colmagro*, where they remained for the winter. In 1557 Burough returned to England, and was afterwards made Comptroller of the Royal Navy.

In the mean time, Juan Vasilovich sent, as his ambassador and orator to the court of London, Osep Napea, who embarked on the 20th July, 1556, on board the Edward Bonaventure, in the bay of St. Nicholas or Archangel, under the direction of Richard Chancelor, Grand Pilot, and accompanied by three other ships, the *Bona Speranza*, the *Philip and Mary*, and the *Confidentia*. This homeward voyage was most disastrous. The Confidentia was lost on the coast of Norway, and all hands perished. The Bona Speranza wintered at Drontheim, and was lost on her passage to England; and the Edward Bonaventure, after

being four months at sea, came into Pitsligo Bay, on the east coast of Scotland; on the 10th November, 1556, and was there wrecked, when, with great difficulty, the ambassador with a few of his attendants were saved; but Richard Chancelor, the Grand Pilot, and most of the crew were drowned. We are told by the writer of this unfortunate voyage, that "the whole masse and bodie of the goods laden in her, was by the rude and ravenous people of the country thereunto adjoining, rifled, spoyled, and carried away, to the manifest losse and utter destruction of all the lading of the said ship."* The ambassador was conducted to London in great pomp, and the connection between the two nations was from that time drawn closer every year. The English merchants trading with Russia extended their commerce far beyond the confines of that extensive empire; but as their discoveries were made by land, they form no part of the present plan, and could not with propriety be introduced.

MARTIN FROBISHER—*First Voyage.* 1576.

While this rapid progress was making in the north-east both by sea and land, under the auspices of the company of merchants trading to Russia, the question of a north-west passage round the northern coast of America to Cathaia and the East

* Voyages and Navigations, Hakluyt, vol. i. p. 286.

Indies, was revived with greater ardour than at any former period, and the pens of the most learned men in the nation were employed to prove the existence, the practicability, and the great advantages of such a passage. Among others, Sir Humphrey Gilbert and Mr. Richard Willes composed very learned and ingenious discourses on the subject. That of the former, in particular, contains much curious argument in favour of such a passage, and was well calculated to infuse a spirit of practical inquiry and discovery among his countrymen; and although it appears not to have been printed until the year 1576, being that in which FROBISHER made his first voyage, yet, having been written many years before, while Sir Humphrey was serving in Ireland, it was undoubtedly very well known to the promoters of Frobisher's voyage.*

Among other matters adduced in proof of a north-west passage between the Atlantic and Pacific, Sir Humphrey states, that "there was one Salvaterra, a gentleman of Victoria in Spain, who came to Ireland in 1568, out of the West Indies, and reported that the north-west passage from Europe to Cathaia was constantly believed in America; and further said, in presence of Sir Henry Sidney, Lord Deputy of Ireland, in Sir H. Gilbert's hearing, that a 'friar of Mexico, called Andrew Urdaneta, more than eight years before

* A Discourse by Sir Humphrey Gilbert, &c. Hakluyt, vol. iii. p. 19.

his then coming into Ireland (i.e. before 1560), told him there, that he came from Mar del Sur into Germany thro' this N.W. passage, and shewed Salvaterra (at that time being then with him in Mexico) a sea card, made by his own experience and travel in that voyage, wherein was plainly set down and described this N.W. passage, agreeing in all points with Ortelius's map.

'And further, this friar told the King of Portugal (as he returned by that country homeward) that there was (of certainty) such a passage N. W. from England, and that he meant to publish the same: which done, the king most earnestly desired him not in any wise to disclose or make the passage known to any nation. For that (said the king) if England had knowledge and experience thereof, it would greatly hinder both the King of Spain and me. This friar (as Salvaterra reported) was the greatest discoverer by sea that hath been in our age; also Salvaterra being persuaded of this passage by the Friar Urdaneta, and by the common opinion of the Spaniards inhabiting America, offered most willingly to accompany me in this discovery, which of like he would not have done if he had stood in doubt thereof.'"

This Urdaneta was with Magelhanes on his discovery of a passage into the South Seas, round America; many years after this he took holy orders, and, residing in New Spain, was applied to by the King of Spain to pilot Legaspi's squadron

to the Phillipines, which he did; and the chart now or recently in use by the Manilla ships is said to be that which was originally Urdaneta's.

It may safely be asserted, that no mention of the discovery attributed by Salvaterra to Urdaneta is to be met with in any Spanish author. But as the falsehood of the friar or the reporter could not at that early period be known in England, and as nothing in it appeared to be improbable, it served to spur on a spirit of adventure, by holding out the hope of certain success from perseverance. Another account of the same kind was afterwards received, which, though utterly false, produced the same encouraging effects. One Thomas Cowles, an English seaman, of Badminster, in Somersetshire, made oath that, being some six years before (1573) in Lisbon, he heard one Martin Chacque, a Portugueze mariner, read out of a book which he, Chacque, had published six years before that; in which it was stated, that twelve years before (1556) he, the author, had set sail out of India for Portugal, in a small vessel of the burden of about eighty tons, accompanied by four large ships, from which he was separated by a westerly gale of wind; that having sailed among a number of islands he entered a gulph, which conducted him into the Atlantic, in the 59° of latitude, near Newfoundland, from whence he proceeded without seeing any more land till he fell in with the north-west part of Ireland, and from thence to Lisbon,

where he arrived more than a month before the other four ships with which he set out.

Whether Frobisher had collected similar reports of the passage having actually been performed, or whether alone from his "knowledge of the sphere and all other skilles appertaining to the arte of navigation" his hopes were grounded, it is quite certain he had persuaded himself that the voyage was not only feasible but of easy execution. His friends, however, were not so readily persuaded to enter into his scheme; but, "as it was the only thing of the world that was left yet undone, whereby a notable mind might be made famous and fortunate," he persevered for fifteen years without being able to acquire the means of setting forth an expedition, on which his mind had been so long and so resolutely bent.

At length, in the year 1576, by the countenance and assistance of Dudley, Earl of Warwick, and a few friends, he was enabled to fit out two small barks, the *Gabriel* of thirty-five and the *Michael* of thirty tons, together with a pinnace of ten tons. With this little squadron he prepared to set out on his important expedition, and on the 8th of June passed Greenwich, where the court then was; and Queen Elizabeth bade them farewell by shaking her hand at them out of the window. On the 11th of July they came in sight of *Friesland*, "rising like pinnacles of steeples, and all covered with snow." This island, whose position has so

greatly puzzled geographers, could not be the Frisland of Zeno, but, being in 61° of latitude, was evidently the southern part of Greenland. The floating ice obliged him to stand to the south-west till he got sight of Labrador, along the coast of which he then stood to the westward, but could neither reach the land nor get soundings on account of the ice. Sailing to the northward he met with a great island of ice, which fell in pieces, making a noise "as if a great cliffe had fallen into the sea." After this he entered a strait in lat. 63° 8′. This strait, to which his name was given from being its first discoverer, is the same which was afterwards named Lumley's Inlet; but *Frobisher's Strait* was, for a long time, supposed by geographers to have cut off a portion from Old Greenland, till Mr. Dalrymple and others shewed the fallacy of such a supposition.

Among the openings between the numerous islands hereabouts, they descried "a number of small things floating in the sea afarre off, which the captain supposed to be porposes or seales, or some kind of strange fish"—but on a nearer approach they were discovered to be men in small boats covered with skins. The captain says, "they be like to Tartars, with long black hair, broad faces and flatte noses, and taunie in colour, wearing seale skinnes, and so doe the women, not differing in the fashion, but the women are marked in the face with blewe streekes downe the cheekes and round about the eyes." They approached the ships with some hesitation, and one of the natives

presently went on board in the ship's boat; and Frobisher, having given him a bell and a knife, sent him back in the boat with five of the crew, directing them to land him on a rock and not to trust themselves where numbers of his countrymen were assembled on the shore; but they disobeyed his orders and were seized by the natives, together with the boat, and none of them heard of more. A few days afterwards, on returning to the same place, the people were observed to be extremely shy, but Frobisher, having succeeded in drawing one of them alongside by ringing a bell and holding it out, as he stretched out his hand to receive it, "caught the man fast and plucked him with maine force, boate and all, into his barke out of the sea. Whereupon, when he found himselfe in captivity, for very choler and disdaine he bit his tongue in twaine within his mouth, notwithstanding he died not thereof, but lived untill he came in England, and then he died of cold which he had taken at sea." With this "strange infidele, whose like was never seene, read nor heard of before, and whose language was neither knowen nor understood of any," Frobisher set sail for England, and arrived at Harwich on the 2d of October, "highly commended of all men for his greate and notable attempt, but speceally famous for the great hope he brought of the passage to Cathaia."

That hope, however, would probably have died away but for an accidental circumstance which

had been disregarded during the voyage. Some of the men had brought home flowers, some grass, and one a piece of stone, "much like to a sea cole in colour," merely for the sake of the place from whence they came. A piece of this black stone being given to one of the adventurers' wives, by chance she threw it into the fire; and whether from accident or curiosity, having quenched it while hot with vinegar, "it glistered with a bright marquesset of golde." The noise of this incident was soon spread abroad, and the stone was assayed by the "gold finers of London," who reported that it contained a considerable quantity of gold.* A new voyage was immediately set on foot for the following year, in which we are told by Master George Best, Frobisher's lieutenant, that "the captaine was specially directed by commission for the searching more of this gold ore then for the searching any further discovery of the passage."†

MARTIN FROBISHER—*Second Voyage.* 1577.

Frobisher was now openly countenanced by Queen Elizabeth, and on taking leave had the honour of kissing her Majesty's hand, who dismissed him "with gracious countenance and comfortable words." He was, besides, furnished with "one tall ship of her Majesties, named the *Ayde*, of nine-score tunnes or thereabouts; and two other

* True Discourse by Master George Best.—*Hakluyt, Voyages*, vol. iii. p. 29. † Ibid.

little barkes likewise, the one called the *Gabriel*, whereof Master Fenton was Captaine: and the other the *Michael*, whereof Master Yorke, a gentleman of my Lord Admiralls, was Captaine:" these two vessels were about thirty tons each. On the 27th of May, having received the sacrament and prepared themselves "as good Christians towards God, and resolute men for all fortunes," they left Gravesend, and after a long passage fell in with Friesland, in lat. 60½° on the 4th of July, the mountains covered with snow and the coast almost inaccessible from the great quantity of drift ice. It is worthy of remark that Frobisher, being in possession of the account of Friesland, by the two Venetians, declares that "for so much of this land as we have sayled alongst, comparing their carde with the coast, we find it very agreeable;" but no creature was seen "but little birdes." They observed islands of ice, "some seventie, some eightie fathome under water," and more than half a mile in circuit; and the ice being fresh, Frobisher is led to the conclusion that these mountains "must be bredde in the sounds, or in some land neere the pole;" and that the "maine sea freeseth not, therefore there is no *mare glaciale*, as the opinion hitherto hath bene." Four days were here spent in vain endeavouring to land, after which they stood for the strait discovered by them the preceding year. They arrived off the north foreland, otherwise *Hall's island*, so called after the

man who had picked up the golden ore, and who was now master of the Gabriel. They proceeded some distance up the strait, when, on the 18th of July, the general taking the gold-finers with him, landed near the spot where the ore had been picked up, but could not find in the whole island "a peece so bigge as a walnut." But all the neighbouring islands are stated to have good store of the ore. They then landed on Hall's greater island, where they also found a great quantity of the ore. On the top of a high hill, about two miles from the shore, "they made a columne or crosse of stones heaped up of a good heigth togither in good sort, and solemnly sounded a trumpet, and saide certaine prayers kneeling about the ensigne, and honoured the place by the name of *Mount Warwicke.*"

Returning to their boats, they espied several of the natives on the top of Mount Warwick waving a flag, "with cries like the mowing of buls, seeming greatly desirous of conference with us." Both sides being suspicious of each other, two men were selected one on the part of each to confer together, and to settle a traffick; and we are told that "one of the salvages, for lacke of better merchandize, cut off the tayle of his coate and gave it unto the generall for a present." On this, which was not a very civil return, the general and the master suddenly laid hold of the two savages. "But the ground under-foot being slipperie with the snow on the side of the hill, their hand-fast fayled, and their prey escaping ranne away and lightly re-

covered their bow and arrows, which they had hid not farre from them behind the rockes. And being only two salvages in sight, they so fiercely, desperately, and with such fury assaulted and pursued our generall and his master, being altogether unarmed, and not mistrusting their subtiltie, that they chased them to their boates, and hurt the generall in the buttocke with an arrow." The soldiers now began to fire, on which the savages ran away and the English after them; when one "Nicholas Conger, a good footman, and uncumbred with any furniture, having only a dagger at his backe, overtooke one of them, and being a Cornish man and a good wrastler, shewed his companion such a Cornish tricke that he made his sides ake against the ground for a moneth after; and so being stayed he was taken alive and brought away, but the other escaped." In the meantime a storm having arisen, they proceeded with their prey to a small island, where keeping good "watch and warde" they lay there all night upon hard cliffs of snow and ice, both wet, cold and comfortless, in a country which yielded no better cheer than rocks and stones, and a people "more readie to eat them then to give them wherewithall to eate."

They now stood over to the southern shore of Frobisher's Strait, and landed on a small island with the gold-finers to search for ore; and "here all the sands and cliffs did so glister and had so bright a marquesite that it seemed all to be gold,

but upon tryall made it prooved no better than black-lead, and verified the proverbe—all is not gold that glistereth."

On another small island, which they named *Smith's Island*, they found a mine of silver, and four sorts of ore "to holde gold in good quantitie;" and on another island a great dead fish, twelve feet long, "having a horne of two yardes long growing out of the snoute or nostrels," which was brought home and "reserved as a jewell" in the queen's wardrobe. They continued to proceed up the strait for about thirty leagues, much hampered with, and frequently in great danger from, the floating ice. In one of the small islands they found a tomb, in which were the bones of a dead man, and several implements belonging to the natives, the use of which was explained to them by the captive "salvage"—who taking in his hand one of their country bridles, "caught one of our dogges and hampered him handsomely therein, as we doe our horses; and with a whip in his hand he taught the dog to drawe in a sled, as we doe horses in a coach, setting himselfe thereupon like a guide." They afterwards found that these people "feede fatte the lesser sort of dogges" to eat as food, and that the larger sort are used to draw their sledges.

In endeavouring to seize a party of natives in *Yorke Sound*, a skirmish ensued in which five or six of the savages were unfortunately put to death, and two women seized, "whereof the one being

old and ugly, our men thought she had been a devil or some witch, and therefore let her goe; the other being young and incumbered with a sucking child at her backe hiding herself behind the rocks, was espied by one of our men, who supposing she had bene a man, shot through the haire of her head, and pierced through the child's arme whereupon she cried out, and our surgeon meaning to heale her child's arme, applyed salves thereunto. But she, not acquainted with such kind of surgery, plucked those salves away, and by continuale licking with her owne tongue, not much unlike our dogs, healed up the childe's arme." It is stated that they found here sundry articles of the apparel of the five unfortunate men who had been seized by the natives the preceding year, which is the only apology offered for the cruel attack on these people.

By means of their two captives they at length brought about an intercourse with the natives; from whom they understood that the five men were still living, and engaged to deliver a letter to them, which letter was couched in the following words:—

"*In the name of God, in whom we all believe, who (I trust) hath preserved your bodies and soules, amongst these infidels, I commend me unto you. I will be glad to seeke by al means you can devise for your deliverance, either with force, or with any commodities within my ships, which I will not spare for your sakes, or any thing els*

I can doe for you. I have aboord, of theirs, a man a woman and a child, which I am contented to deliver for you, but the man which I carried away from hence the last yeere is dead in England. Moreover you may declare unto them, that if they deliver you not I will not leave a man alive in their countrey. And thus, if one of you can come to speake with mee, they shall have either the man, woman or childe in pawne for you. And thus unto God whom I trust you doe serve, in hast I leave you, and to him wee will daily pray for you. This Tuesday morning the seventh of August, 1577."

The men however never appeared, and as the season was far advanced and the general's commission directed him to search for gold ore, and to defer the further discovery of the passage till another time, they set about the lading of the ships, and in the space of twenty days, with the help of a few gentlemen and soldiers, got on board almost two hundred tons of ore. On the 22d August, after making bonefires on the highest mount on this island, and firing a volley for a farewell "in honour of the Right Honourable Lady Anne, Countess of Warwicke, whose name it beareth," they set sail homewards, and after a stormy passage they all arrived safe in different ports of Great Britain, with the loss only of one man by sickness, and another who was washed overboard.*

* Hakluyt's Voyages, vol. iii. p. 32.

The Queen and her court were so highly delighted in "finding that the matter of the gold ore had appearance and made shew of great riches and profit, and the hope of the passage to Cathaia by this last voyage greatly increased," that after a minute examination by the commissioners specially appointed, it was determined that the voyage was highly worthy of being followed up. The Queen gave the name of *Meta incognita* to the newly discovered country, on which it was resolved to establish a colony. For this purpose a fleet of fifteen ships were got ready, and one hundred persons appointed to form the settlement and remain there the whole year, keeping with them three of the ships; the other twelve were to bring back cargoes of gold ore. Frobisher was constituted admiral and general, and, on taking leave, received from the Queen a gold chain, and the rest of the captains had the honour of kissing her Majesty's hand.

The fleet sailed from Harwich on the 31st May, 1578, passed Cape Clear on the 6th June, and on the 20th of that month discovered west Friesland, which they now named *West England;* landed and took possession thereof; but the natives abandoned their tents and fled. The fleet then proceeded to Frobisher's strait, giving to the last cliff in sight

of West England, "for a certaine similitude," the name of *Charing Cross.* They found the strait choked up with ice, and the bark Dennis, of one hundred tons, received such a blow with a rock of ice, that she sunk instantly in sight of the whole fleet, but the people were all saved. Unfortunately however she had on board part of the house which was intended to be erected for the winter settlers. A violent storm now came on, and the whole fleet was dispersed, some being driven with the ice into the strait, and there shut up, and others swept away among the drift ice into the sea. Their distresses and dangers and sufferings are described in most lamentable terms. And when, at length, they got together again, they were so bewildered by the fog, snow and mist, and so driven about by the tides and currents, the noise of which was equal "to the waterfall of London bridge," that a doubt arose among the masters and pilots of the fleet where they were. In this dilemma two of the ships parted company; the rest followed Frobisher to the north-west coast of Greenland, along which he passed to the northward, thinking, or as the writer of the voyage says, pretending and "persuading the fleete always that they were in their right course, and knowen straights." At length, after many perils from storms, fogs, and floating ice, the general and part of the fleet assembled in the *Countess of Warwick's Sound* in Frobisher's strait,

when a council was held on the 1st August, at which it was determined to send all persons and things on shore upon Countess of Warwick's island; and on the 2d August, orders were proclaimed by sound of trumpet for the guidance of the company during their abode thereon. It was found however, on examining the bills of lading, that the east side and the south side only of the house were saved, and those not perfect, many pieces having been destroyed when used as fenders against the ice. There was also a want of drink and fuel for a hundred men, the greatest store being in the missing ships. For these and sundry good and sufficient reasons, it was determined in council "that no habitation should be there this yeer."

Captain Best of the Ann Francis, one of the missing ships, discovered "a great black island," where such plenty of black ore was found "as might reasonably suffice all the gold gluttons of the world," which island, "for cause of his good luck," the captain called after his own name, *Best's Blessing*. He also ascended a high hill called *Hatton's Headland*, where he erected a column or cross of stone in token of Christian possession; "here also he found plentee of blacke ore, and divers pretie stones."

The 30th August, having arrived and all hands evidently disheartened with the extreme cold and tempestuous weather, a council was again held, at which it was determined, for divers good and ubstantial reasons, that each captain and gentle-

man should look to the lading of his own ship with ore, and be in readiness to set homeward by a certain day, which it appears was the following one or 31st August. After a stormy passage, in which it is stated that "many of the fleete were dangerously distressed, and were severed almost all asunder," they all arrived at various ports of England, about the 1st of October, with the loss by death of about forty persons.*

The Busse of Bridgewater, in her homeward passage, fell in with a large island to the south-east of Friesland, in latitude 57½°, which had never before been discovered, and sailed three days along the coast, the land appearing to be fertile, full of wood, and a fine champaign country. On this authority the island was laid down on our charts; but was never afterwards seen, and certainly does not exist; though a bank has recently been sounded upon, which has revived the idea of the Friesland of Zeno and the Busse of Bridgewater having been swallowed up by an earthquake.

It is somewhat remarkable, that a man of Frobisher's sagacity, who in his first voyage soon discovered that the open and deep sea does not freeze, but that the ice originates in rivers, bays, and creeks, and floats about till it clings by the land, or is forced into narrow and shallow straits, should have persevered in struggling among straits and ice, when he knew he had an open sea

* Hakluyt's Voyages, vol. iii. p. 39.

between Greenland and the archipelago of islands, among which is the strait bearing his name; but his first voyage only was in fact a voyage of discovery; the second and third had for their objects golden mines and a new settlement, and both ended in disappointed expectations.

Frobisher's three voyages were evidently considered as a total failure by the court, both of immediate gain, and of prospective hope as to the original object of the expedition; and for the next seven years we hear nothing more of the general, till, in 1585, we find him commanding the Aid, in the expedition of Sir Francis Drake to the West Indies. In 1588 he commanded the Triumph, one of the three largest ships engaged with the Spanish Armada, in which he fought with great bravery; and received the honour of knighthood from the lord high admiral on board his own ship at sea. In 1590 he was appointed by the queen to command a squadron on the coast of Spain, with orders to co-operate with Sir John Hawkins. In 1594 he was detached with four ships of war to assist Henry IV. of France against a body of Leaguers and Spaniards, then in possession of a part of Britanny, and strongly entrenched in the neighbourhood of Brest. On the 7th of November, when assaulting the fort of Croyzon, he received a wound in the hip from a ball, of which he died shortly after, having brought his little squadron safely back to Plymouth, where he was interred. The wound, according to Stowe, was not

mortal in itself, but became so through the neglect or ignorance of his surgeon, who, having extracted the ball, left the wadding in the wound, which caused it to fester.

Sir Martin Frobisher was born of humble parents, in the town of Doncaster, and is supposed to have betaken himself early to sea. He is represented as a man of great courage, of much experience, and correct conduct; but of a hasty temper, harsh and violent. There is a portrait of him in the picture gallery of Oxford.*

EDWARD FENTON. 1577.

It would be unjust to pass over the name of Mr. EDWARD FENTON, a gentleman who greatly distinguished himself in many gallant and adventurous actions. At the recommendation of the Earl of Warwick, he accompanied Sir Martin Frobisher as Captain of the Gabriel in 1577; and in the following year commanded the Judith, one of the fifteen vessels of which the squadron destined to form the settlement on Meta Incognita was composed; and in the third expedition he had the title of Rear-Admiral. Notwithstanding the three unsuccessful attempts for the discovery of a north-west passage, Fenton remained firmly persuaded that such a passage was practicable, and might be resumed with the strongest proba-

* Biog. Brit.

bility of success. His repeated solicitations to be employed on this enterprize, joined to the powerful interest of the Earl of Leicester, one of his patrons, procured him at length an opportunity of trying his fortune.*

A voyage was set forth, under the auspices, and chiefly at the expense, of the Duke of Cumberland, the object of which, as would appear from Fenton's instructions, was of a two-fold nature: namely, to proceed to the East Indies by one of the usual routes, and from the Moluccas to endeavour to return by the north-east; or in other words, to discover the north-west passage on the side of the Pacific, then known by the name of the South Seas; but the real object was, in Sir William Monson's opinion, to try his fortune in the Indian seas, as Drake had already done with so much success. But the king of Spain, having anticipated the design, sent a fleet to intercept him in the strait of Magellan. Fenton on his passage out discovered this and thought it prudent to return to England, but not before he had engaged and sunk the Spanish Vice-Admiral, whom he met with in a Portugueze port. After this he had the command of the *Mary Rose*, and behaved most gallantly in the attack on the Spanish Armada in 1588. He died at Deptford in 1603, and was buried in the parish church of that place, in which

* Hakluyt, vol. iii. p. 764.

is a handsome monument, with a chaste inscription, erected to his memory by the Earl of Corke, who married his niece.*

ARTHUR PET AND CHARLES JACKMAN. 1580.

Although the fruitless voyages of Martin Frobisher had abated the zeal of the court, they did not in the least damp the ardour of private enterprize. The Russia merchants, having made so considerable a progress in the east by land, now determined to fit out another expedition by sea, for the purpose of renewing the attempt to discover a north-east passage to China. Two barks, the *George* and the *William*, under the command of ARTHUR PET and CHARLES JACKMAN, were fitted out for this service. They left Harwich on the 30th May, reached Wardhuys the 23d June, crossed the bay of St. Nicholas, passed much ice, and on the 16th July made the body of the island, as they supposed, of Nova Zembla. On the 17th, after passing through much ice and shoal water, they reached the bay of Petchora, and the following day came to Waigatz, where they found great store of wood and water. To the eastward of Waigatz they were so hampered with the ice that they resolved to return, a task which with difficulty they effected, the sea being so thickly covered

* Fuller's Worthies. Sir W. Monson's Naval Tracts. Camden.

with ice, that they were enclosed in it for sixteen or eighteen days, and the air was constantly loaded with thick fog. On the 17th August they repassed the strait of Waigatz, among much ice, snow, and fog, and on the 22d the ships parted company. On the 27th the George was opposite Kegor, on the 31st doubled the North Cape, and on the 26th October they reached Ratcliffe, "and praised God for their safe returne."

The William was less fortunate. She arrived at a port in Norway to the southward of Drontheim, in October, and wintered there. In the February following she departed from thence, in company with a ship belonging to the king of Denmark, towards Iceland, and from that time was never more heard of.

From the meagre narrative of this voyage it is sufficiently evident, that Pet and Jackman were but indifferent navigators, and that they never trusted themselves from the shore and out of shallow water, whenever the ice would suffer them to approach it; a situation of all others where they might have made themselves certain of being hampered with ice, though only in the 68th and 69th degrees of latitude. From this time the English merchants, trading to Russia, were satisfied with sending their ships to the bay of St. Nicholas, or Archangel, and of committing their enterprizes of eastern discoveries to journeys by land.

SIR HUMPHREY GILBERT. 1583.

The successful efforts of the Russia company by land gave new vigour to a spirit for foreign traffic and discoveries, and turned men's minds once more to the north-westward. The indefatigable exertions of Sir HUMPHREY GILBERT, his great talents and powerful interest, had procured for him letters patent, dated in 1578, authorising him to undertake western discoveries, and to possess lands unsettled by Christian princes or their subjects; and the same year he is said to have made a voyage to Newfoundland, of which, however, no detailed account appears to have been published. The grant in the patent was made perpetual, but at the same time declared void, in case no possession was actually taken within the space of six years. Sir Humphrey, therefore, the year before its expiration, prepared for a new expedition and, in the very same year, being 1583, Queen Elizabeth granted another patent to his younger brother, Adrian Gilbert, of Sandridge, in the county of Devon, and his associates, conferring on them the privilege of making discoveries of a passage to China and the Moluccas, by the north-westward, north-eastward or northward; to be incorporated by the name of "The Colleagues of the Fellowship for the Discoverie of the north-west Passage."

Sir Humphrey in the meantime set out to take

possession of the northern parts of America and Newfoundland. The fleet consisted of five ships of different burdens, from two hundred to ten tons, in which were embarked about two hundred and sixty men, including shipwrights, masons, smiths and carpenters, besides "minerall men and refiners;" and, "for the solace of our people," says Mr. Haies, "and allurement of the savages, we were provided of musicke in good varietie; not omitting the least toyes, as morris dancers, hobby horsses, and maylike conceits, to delight the savage people, whom we intended to winne by all faire meanes possible."* This little fleet left Cawsand Bay on the 11th of June. In lat. 60° N. they found themselves opposed by mountains of ice driving about on the sea, having passed which, they fell in with the land on the 30th of July. It is noticed that, at this early period, "the Portugals and French chiefly have a notable trade of fishing on the Newfoundland banke, where there are sometimes more than a hundred sail of ships."

On entering the harbour of St. John's, the general and his people were entertained with great profusion by the English merchants, who carried them to a place called *the garden*—but the writer of the voyage observes, that nothing appeared but "nature itselfe without art;" plenty of roses and raspberries were found growing wild in every

* *Hayes's Narrative of the Voyage.*—Hakluyt, vol. iii. p. 154.

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place. Here, in presence of the English traders and the foreigners assembled, possession was taken, in the queen's name, of the harbour and two hundred leagues every way; and three laws were immediately made and promulgated on the spot: 1. For the public exercise of religion according to the church of England; 2. For maintaining her majesty's right and possession, against which any party offending, to be adjudged and executed as in case of high treason; and 3. For preventing the utterance of words sounding to the dishonour of her majesty, the party offending to lose his ears, and his ship and goods to be confiscated. Several parcels of land were granted out; but, it seems, "the generall was most curious in the search of metals, commanding the minerall man and refiner especially to be diligent." This man was a Saxon, "honest and religious, named Daniel;" and he brought to Sir Humphrey what he called silver ore, but the general would not have it tried or spoken of till they got to sea, "as the Portugals, Biscains and Frenchmen were not farre off."

Sir Humphrey now embarked "in his small frigate, the Squirrel," which, in fact, was a miserable bark of ten tons, and taking with him two other ships, the *Delight*, commanded by Captain Brown, and the *Golden Hinde*, by Captain Hayes, proceeded on discovery to the southward; but the Delight, with all the valuables on board, was wrecked among the flats and sands near Sable

Island, when only twelve men escaped in a boat out of more than a hundred souls, who all, except these, perished; among whom was Stephanus Parmenius, of Buda, a learned Hungarian, who had embarked on this enterprize for the purpose of recording, "in the latine tongue, the gests and things worthy of remembrance;" and also "the Saxon refiner and discoverer of inestimable riches." It was said that the loss of the miner and the ore preyed on Sir Humphrey Gilbert's mind, as on the strength of his mine he had reckoned on borrowing 10,000*l.* from the queen for his next voyage.* Mr. Edward Haies, the narrator, observes, that "like the swanne that singeth before her death, they in the admirall (or Delight) continued in sounding of trumpets with drummes and fifes; also winding the cornets and haughtboyes; and in the end of their jolitie left with the battell and ringing of doleful knels."

Sir Humphrey, however, escaped in his little bark, and, with the Golden Hinde, determined on proceeding to England. His little frigate, as she is called, is described as being wholly unfit to proceed on such a voyage; and when he was entreated not to venture in her, but take his passage in the Golden Hinde, this brave man replied, "I will not forsake my little company going homeward, with whom I have passed so many

* Hayes's Account of the Voyage in Hakluyt, vol. iii. p. 155.

stormes and perils." On the 9th September, having passed the Azores, Sir Humphrey's frigate was observed to be nearly overwhelmed by a great sea; but she recovered the stroke of the waves, and immediately afterwards the general was observed by those in the Hinde sitting abaft, with a book in his hand, calling out "Courage, my lads! we are as near to heaven by sea as by land!" The same night this little bark and all within her were swallowed up by the sea, and no more heard of.

Thus perished this brave and adventurous gentleman. Mr. Hayes says, that he was chiefly induced to continue in the Squirrel, and adhere to the fatal resolution of not quitting her, in consequence of a malicious report that was spread abroad, and had reached his ears, that he was afraid of the sea. But it is not probable that a man of such undaunted courage and vigour of intellect should have been swayed by any such consideration; though, in this chivalrous age, he might perhaps have been influenced by the motto which he bore on his arms—*Mutare vel timére sperno.**

Sir Humphrey Gilbert was descended from an ancient and honourable family in Devonshire, whose mother married a second time to Walter Raleigh, Esq., from which marriage was born the

* Prince, in his *Worthies of Devon*, makes the motto *Malleni mori quam mutare.*

celebrated Sir Walter Raleigh, who was thus half brother to Sir Humphrey. He was educated at Eton, from whence he was sent to Oxford, where he was distinguished for his talents in an age fruitful in great men. He served in Ireland with much credit, and was made President of Munster, in which situation he conducted himself with firmness and address. He may truly be styled "the father of western plantation;" and Prince bestows on him the following eulogium:—"He was an excellent hydrographer, and no less skilful mathematician; of an high and daring spirit, though not equally favoured of fortune; yet the large volume of his virtues may be read in his noble enterprizes; the great design whereof was to discover the remote countries of America, and to bring off those salvages from their diabolical superstitions, to the embracing the gospel of our Lord and Saviour Christ; for which, his zeal deserves an eternal remembrance."*

JOHN DAVIS.—*First Voyage.* 1585.

The merchants of London and of the west country being satisfied "of the likelyhood of the discovery of the north-west passage," and that the former adventurers had been diverted from

* *Prince's Worthies of Devon*, p. 417.

their main purpose by objects foreign to the original design, resolved on a new expedition, whose sole motive should be that of discovery. The superintendance of the outfit was entrusted to Mr. William Sanderson, Merchant of London; and Mr. JOHN DAVIS, of Sandridge, in Devonshire, by the recommendation, no doubt, of his neighbour, Mr. Adrian Gilbert, received the appointment of Captain and chief pilot of this new enterprize. Two small barks, one of 50 tons, called the *Sunshine*, and the other of 35 tons, named the *Moonshine*, were put under his orders. In the first were twenty-three persons, of whom four were musicians; and in the latter nineteen. They left Dartmouth on the 7th June, 1585, and on the 19th July were among the ice on the western side of Greenland, where they heard "a mighty great roaring of the sea," which, on a closer examination in the boats, they found to proceed from the "rowling together of islands of ice." The next day, as they proceeded to the northward, the fog cleared away, and they perceived a rocky and mountainous land, in form of a sugar loaf, appearing as if above the clouds. The top was covered with snow, and the shore beset with ice a full league into the sea; and the whole surrounding aspect presented so "true a paterne of desolation," that Davis gave to it the name of "*the Land of Desolation.*" Finding it impossible to reach the shore near this spot on account of the ice, Davis determined to return

to the southward. In standing along the coast he observed drift-wood floating about daily, and the Moonshine picked up a tree "sixty feet long and fourteene handsfuls about, having the roote upon it." The air was moderate, like April weather in England, and it was cold only when the wind blew from the land or ice, but when it came over the open sea "it was very hote."

From this coast they stood off again to the north-westward for four days, when they saw land in latitude 64° 15′, the weather still being temperate and the sea free from ice. It was an archipelago of islands, "among which were many faire sounds and good roads for shipping;" to that in which they anchored Davis gave the name of *Gilbert's sound*. A multitude of natives approached in their canoes, on which the musicians began to play and the sailors to dance and make tokens of friendship. The simple and harmless natives soon understood their meaning, and were so delighted with their treatment and the music that they flocked round them in vast numbers, not less than thirty-seven of their boats being at one time along side their small barks. The sailors shook hands with them and won so far on their good will that they obtained from the "salvages" whatever they wished—canoes, clothing, bows, spears, and in short whatever they asked for. "They are very tractable people," says the narrator, "void of craft or double dealing, and easie to be brought to any civilitie or good order;

but we judge them to be idolaters, and to worship the sunne."

The drift-wood was brought to these islands in great abundance. The cliffs are described to be of "such oare as M. Frobisher brought from Meta incognita," and they had "divers shewes of Study or Muscovy glasse, shining not altogether unlike christall." They found a red fruit growing on the rocks, which was "sweet, full of red juice, and the ripe ones like corinths."

On the 1st August, our adventurers stood farther to the north-west, and on the 6th, discovered land in 66° 40′; the sea altogether free from ice. Here they anchored their barks, "in a very faire rode under a brave mount," to which they gave the name of *Mount Raleigh*, "the cliffs whereof were as orient as gold." The forcland towards the north they called *Dier's Cape*, that towards the south *Cape Walsingham;* and to the great bay between them they gave the name of *Exeter sound*, and to their anchorage *Totness Road.* On their first landing they met with "four white beares of a monstrous bignesse," one of which they killed.

On the 8th August, they returned to the southward, and on the 11th, came to the next southerly cape of the land they had coasted, which they named the *Cape of God's Mercy*, "as being the place of our first entrance for the discovery." Keeping this land to the northward of them, they sailed to the westward, and had a fine open passage

from twenty to thirty leagues in width, entirely free from ice, " and the water of the very colour, nature, and quality, of the main ocean, which gave us the greater hope of our passage." Having proceeded sixty leagues, a cluster of islands was observed in the midst of the passage. Here, the weather becoming thick and foggy, and the wind from the south-east, and no appearance of amendment, they remained six days, at the end of which they determined on returning homewards, and accordingly set sail on the 2d August, and arrived safe in Dartmouth on the 30th September.

JOHN DAVIS—*Second Voyage.* 1586.

The important discovery of the free and open passage to the westward, between Frobisher's archipelago and the land now called *Cumberland's island*, the great number of whales, seals, deer skins, and other articles of peltry in possession of the natives, which were freely offered by them to the crews of the ships, excited such lively hopes at home for the extension both of traffick and discovery, that the merchants of Exeter, and other parts of the west of England, contributed a large trading vessel of one hundred and twenty tons, called the *Mermaid*, to accompany the little squadron of Davis on a second voyage, which now

consisted of the *Sunshine*, the *Moonshine*, and a pinnace of ten tons, named the *North Star*.

On the 7th May they left Dartmouth, and on the 15th June made the land about Cape Farewell; coasted the west side of Greenland, and from hence they had much intercourse with the natives, who came off to their ships sometimes in an "hundred canoes at a time, sometimes fourtie, fiftie, more and less as occasion served, bringing with them seale skinnes, stagge skinnes, white hares, seale fish, samon peale, smal cod, dry caplin, with other fish, and birds such as the country did yield."

The civility of the people induced the adventurers to examine the rivers and creeks which ran up into the main land. They found the surface much the same as that of the moory and waste grounds of England. The natives are described as "of good stature, and in body proportioned, with small slender hands and feet, with broad visages and small eyes, wide mouths, the most part unbearded, great lips, and close toothed." They are represented as being idolaters, having great store of images, which they wear about them and in their boats. They are said to be witches, and to practise many kinds of enchantments; they are strong and nimble, fond of leaping and wrestling, in which they beat the best of the crew, who were west-country wrestlers. They discovered, however, in a little time that these Greenlanders were

both very thievish and very mischievous, cutting their cables and stealing every thing they could lay their hands on. They are said to live mostly on fish, which they eat raw; drink salt water and eat grass and ice as luxuries.

On the 17th July, our navigators were all alarmed at the appearance of "a most mighty and strange quantity of yce in one intire masse, so bigge as that we knew not the limits thereof." Its size and shape and height are stated by the writer of the voyage to be so "incredible to be reported in trueth," that he declines speaking more of it, least he should not be believed. They coasted this ice till the 30th July, which occasioned such extreme cold that all their shrouds, ropes and sails were frozen, and the air was loaded with a thick fog. The men grew sick and feeble, and wished to return, and advised their captain, through his overboldness, not to leave their widows and fatherless children to give him bitter curses. He therefore thought of ordering the Mermaid to remain where she was, in readiness to return homewards, while with the Moonshine he should proceed round the ice. He discovered land in 66° 33', long. 70° from the meridian of London, "voyd of trouble without snow or ice." This land turned out to be a group of islands. The weather was found to be very hot; and they were much troubled with a fly "which is called Muskyto, for they did sting grievously." After

leaving the Mermaid they sailed west fifty leagues, and discovered land in lat. 66° 19′. Turning to the south they fell in with land north-west from them, being a fair promontory in lat. 65°, having no land on the south; "here," says Davis, "wee had great hope of a thorough passage." From hence they continued to the southward among many islands, and afterwards along the coast from the lat. 67 to 57 degrees. On the 28th August, they fell in with a fair harbour in lat. 56° and sailed ten leagues into the same, with fine woods on both sides. On the 4th September being in lat. 54°, Davis says, "he had a perfect hope of the passage, finding a mightie great sea passing between two lands west." On this part of the coast of Labrador two of their men were slain by the savages. The weather now became most stormy and tempestuous, and on the 11th September they weighed anchor and arrived in England in the beginning of October. It should be remarked that, in all this track, Davis was entirely alone in his little bark, the Moonshine; he having, on his arrival off Cape Farewell, ordered the Sunshine and the North Star to seek a passage northward between Greenland and Iceland as far as lat. 80°, if not interrupted by land. On the 12th June the two latter vessels put into Iceland and remained there till the 16th, and steering north-west came, on the 3d July, between two firm islands of ice. This made them turn about, and, coasting Greenland within three leagues off

the land and along a continued field of ice, they came on the 17th to the land of Desolation, crossed over to Gilbert's Sound, the appointed rendezvous, where they remained till the 31st, when hearing nothing of their consort, they departed for England, and the Sunshine arrived at Radcliffe on the 6th October: she had parted from the North Star in a great storm on the 3d September, the latter of which was never heard of more.

JOHN DAVIS—*Third Voyage.* 1587.

The second voyage of DAVIS had not been attended with any very encouraging circumstances to the adventurers; but this intrepid navigator writes to his patron Mr. W. Sanderson, on his arrival, in these terms: "I have now experience of much of the north-west part of the world, and have brought the passage to that likelihood, as that I am assured it must bee in one of foure places, or els not at all." A third voyage was therefore determined on, and the *Elizabeth* of Dartmouth, the *Sunshine* of London, and the clincher *Helena* of London were appointed for this expedition. They sailed from Dartmouth on the 19th May, and on the 14th June descried the land, consisting of very high mountains covered with snow. It was composed of islands lying in lat. 64°.

On the 24th they had reached the lat. of 67°

40′ and saw great store of whales. On the 30th they had clear weather and found by observation that they were in 72° 12′, and that the variation of the compass was 28° W. The land, along which they had been running, and which was the west coast of Greenland, they named the *London coast*. At this high latitude, finding the sea all open to the westward and to the northward, and the wind shifting to the northward, they left that part of the shore, which they called *Hope Sanderson* and, shaping their course west, ran forty leagues in that direction without meeting with any land. On the 2d July, however, they fell in with a "mightie bank of ice" to the westward, among which they were hampered for eleven or twelve days. They then determined to get near the shore and wait five or six days "for the dissolving of the ice, hoping that the sea continually beating it, and the sunne with the extreme force of heat which it had always shining upon it, would make a quicke dispatch, that we might have a further search upon the westerne shore;" but they found the water too deep to come to an anchor, and either from "some fault in the barke or the set of some current," they were driven six points out of their course, and on the 19th were abreast of Mount Raleigh: from hence they stood sixty leagues up the strait discovered in the first voyage, (and which is now called *Cumberland Strait,*) and anchored among the islands at the bottom of the gulph, to

which they gave the name of the *Earl of Cumberland's Isles.* The variation of the compass was 30°. The air was extremely hot. They stood out from these islands to the south-east and passed an inlet between 63° and 62° of latitude, which they named *Lumley's Inlet,* and which is the strait discovered by Frobisher, and bearing his name. Passing a headland, which they called *Warwick's Foreland,* and crossing a great gulf, they fell in on the 1st August with the southernmost cape of the gulf, to which they gave the name of *Cape Chidley,* in 61° 10′ lat. The strait therefore which bears the name of Hudson on all the charts was in fact discovered by Davis, but that in which he sailed to the highest point of northern latitude was very properly stamped with his name. On *Lord Darcie's island* they saw five deer, which took immediately to the sea on their landing; one of them is stated to be "as bigge as a good prety cow, and one very fat, their feet as bigge as oxe feet." From hence they shaped their course for England, where they arrived on the 15th September, 1587.

Mr. Davis, on his arrival at Dartmouth, writes thus to Mr. Sanderson:—"I have bene in 73°, finding the see all open, and forty leagues betweene land and land. The passage is most probable, the execution easie, as at my coming you shall fully knowe."*

* Hakluyt's Voyages and Navigations.

It would appear, however, that Davis was unable to prevail on the merchant adventurers to continue what might hitherto be named fruitless expeditions; but that his zeal for discovery was unabated appears from a little treatise written and published by him eight years after his return from his third voyage.* In this work, addressed to the "lordes of her maiesties most honorable privie consayle," besides many ingenious arguments for the existence of a north-west passage, and the great advantages which England would derive from the discovery thereof, there is the following brief and comprehensive narrative of his own three voyages.

"In my first voyage not experienced of the nature of those clymattes, and having no direction either by Chart, Globe or other certayne relation in what altitude that passage was to bee searched. I shaped a Northerly course and so sought the same towards the South, and in that my Northerly course I fell upon the shore which in ancient time was called Groynland fiue hundred leagues distant from the durseys West Nor West Northerly, the land being very high and full of mightie mountaines all couered with snow no viewe of wood grasse or earth to be seene, and the shore two

* The Worlde's Hydrographicall Discription, 1595. A very rare and curious little book; of which perhaps not three copies are in existence.

leages of into the sea so full of yse as that no shipping cold by any meanes come neere the same. The lothsome vewe of the shore, and irksome noyse of the yse was such as that it bred strange conceipts among us, so that we supposed the place to be wast and voyd of any sencible or vegitable creatures, wherupon I called the same Desolation; so coasting this shore towardes the South in the latitude of sixtie degrees, I found it to trend towardes the west, I still followed the leading thereof in the same height, and after fiftie or sixtie leages, it fayled and lay directly north, which I still followed, and in thirtie leages sayling upon the West side of this coast by me named Desolation, we were past all the yse and found many greene and plesant Ills bordering upon the shore, but the mountains of the maine were still covered with great quantities of snowe, I brought my shippe among those ylls and there mored to refreshe our selves in our wearie travell, in the latitude of sixtie foure degrees or there about. The people of the country having espyed our shipps came down unto us in their canoes, holding up their right hand to the Sunne and crying Yliaout, would stricke their brestes, we doing the like the people came aborde our shippes, men of good stature, unbearded, small eyed and of tractable conditions by whom as signes would permit, we understoode that towardes the North and West there was a great sea, and using the people with kindnesse in

geuing them nayles and knifes which of all things they most desired, we departed, and finding the sea free from yse supposing our selves to be past all daunger we shaped our course West Nor West thinking thereby to passe for China, but in the latitude of sixtie sixe degrees, wee fell with an other shore, and there founde an other passage of 20. leages broade directly West into the same, which we supposed to bee our hoped straygh̄t, we intered into the same thirty or fortie leages, finding it neither to wyden nor straighten, then considering that the yeere was spent for this was in the fyne of August, and not knowing the length of this straight and dangers thereof, we tooke it our best course to retourne with notice of our good successe for this small time of search. And so retourning in a sharpe fret of Westerly windes the 29. of September we arived at Dartmouth. And acquainting master Secretory with the rest of the honorable and worshipfull adventurers of all our procedinges. I was appointed againe the seconde yeere to search the bottome of this straight, because by all likelihood it was the place and passage by us laboured for. In this second attempt the merchants of Exeter, and other places of the West became adventurers in the action, so that being sufficiently furnished for sixe monthes, and having direction to search this straighte, untill we found the same to fall into an other sea upon the West side of this part of America, we should

agayne retourne for then it was not to be doubted, but shiping with trade might safely bee conueied to China and the parts of Asia. We departed from Dartmouth, and ariving unto the south part of the coast of Desolation costed the same upon his west shore to the lat. of 66. degres, and there ancored among the ylls bordering upon the same, where wee refreshed our selues, the people of this place came likewise vnto vs, by whome I vnderstood through their signes that towardes the North the Sea was large. At this place the chiefe shipe wherupon I trusted, called the Mermayd of Dartmouth, found many occasions of discontentment, and being unwilling to proceede she there forsooke me. Then considering howe I had giuen my fayth and most constant promise to my worshipfull good friend master William Sanderson, who of all men was the greatest aduenturer in that action, and tooke such care for the perfourmance thereof that hee hath to my knowledge at one time disbursed as much money as any fiue others whatsoeuer out of his owne purse, when some of the company haue bin slacke in giuing in their aduenture. And also knowing that I should lose the fauour of master Secretory, if I should shrinke from his direction, in one small barke of thirty tonnes, whereof master Sanderson was owner, alone without farther comfort or company I proceeded on my voyage, and ariuing unto this straights followed the same eightie leages vntill I came among

many ylandes, where the water did eb and flowe sixe fadome vpright, and where there had beene great trade of people to make trayne. But by such thinges as there we found wee knewe that they were not Xtians of Europe that vsed that trade, in fine by seaching with our boate, wee founde small hope to passe any farther that way, and therefore retourning againe recouered the sea and so coasted the shore towardes the South, and in so doing (for it was to late to search towardes the North) wee founde an other great inlett neere fortie leages broade where the water entred in with violent swiftnes, this we likewise thought might be a passage, for no doubt but the North partes of America are all ylands, by ought that I could perceiue therein, but because I was alone in a small barke of thirtie tonnes, and the yeere spent I entered not into the same for it was now the seuenth of September, but coasting the shore towardes the South we saw an incredible number of birdes, hauing diuers fishermen aborde our barke they all concluded that there was a great scull of fish, wee beeing vnprouided of fishing furniture, with a long spike nayle mayde a hoke, and fastening the same to one of our sounding lynes, before the bayte was changed wee tooke more then fortie great cods, the fishe swimming so aboundantly thicke about our barke as is incredible to be reported of, which with a small portion of salte that we had, wee preserued some thirtie

couple, or there aboutes, and so returned for England. And hauing reported to master Secretory the whole successe of this attempt, hee commanded mee to present unto the most honorable Lorde high thresurer of England some parte of that fish, which when his Lordship saw and hearde at large the relation of this seconde attempt, I receiued fauorable countenance from his honour, aduising mee to prosecute the action, of which his Lordship conceiued a very good opinion. The next yeere although diuers of the aduenturers fel from the action, as al the western merchantes and most of those in London yet some of the aduenturers both honorable and worshipfull continued their willing fauour and charge, so that by this meanes the next yeere 2. shippes were appointed for the fishing and one pynace for the discouery.

" Departing from Dartmouth through Gods merciful fauour I ariued to the place of fishing and there according to my direction I left the 2: shipps to follow that busines, taking their faithful promise not to depart vntill my returne vnto them, which shoulde bee in the fine of August, and so in the barke I proceeded for the discouery but after my departure in sixteene dayes the shippes had finished their voyage, and so presently departed for England, without regard of their promise, my selfe not distrusting any such hard measure proceeded in the discouerie and followed my course in the free and open sea betweene North and Nor west to the lati-

tude of sixtie seuen degrees and there I might see America,* West from me, and Desolation East, then when I saw the land of both sides, I began to distrust that it would prooue but a gulfe, notwithstanding desirous to knowe the full certainty I proceeded, and in sixtie eight degrees the passage enlarged so that I could not see the westerne shore, thus I continued to the latitude of seuentie fiue degrees, in a great sea, free from yse coasting the westerne shore of Desolation, the people came continually rowing out vnto me in their Canoas twenty, forty, and one hundred at a time, and would giue me fishe dried, Samon, Samon peale, cod, Caplin, Lumpe, stone base, and such like, besides diuers kindes of birdes, as Partrig, Fesant, Gulls, sea birdes, and other kindes of fleshe, I still laboured by signes to knowe from them what they knew of any sea towards the North, they still made signes of a great sea as we vnderstood them, then I departed from that coast thinking to discouer the North parts of America, and after I had sayled towardes the west neere fortie leages I fell upon a great bancke of yse, the wind being North and blewe much, I was constrained to coast the same towardes the South, not seeing any shore West from me, neither was there any yse towards the North, but a great sea, free, large, very salt

* This land must have been the *James's Island* of some of our charts, the existence of which however has been considered doubtful.

and blue and of an unsearcheable depth. So coasting towardes the South I came to the place wher I left the shippes to fishe, but found them not. Then being forsaken and left in this distresse referring my selfe to the mercifull prouidence of God, shaped my course for England and vnhoped for of any God alone releuing me I ariued at Dartmouth, by this last discouerie it seemed most manifest that the passage was free and without impediment towards the North, but by reason of the spanish fleete and unfortunate time of master Secretoryes death the voyage was omitted and neuer sithens attempted. The cause why I use this particular relation of all my procedinges for this discouery, is to stay this obiection, why hath not Dauis discouered this passage being thrise that wayes imploied? how far I proceeded and in what fourme this discouery lyeth, doth appeare upon the Globe which master Sanderson to his verye great charge hath published whose labouring indeuour for the good of his countrie, deserueth great fauour and commendations. Made by master Emery Mullineux a man wel qualited of a good iudgement and verye expert in many excellent practises, in my selfe being the onely meane with master Sanderson to imploy master Mulineux therein, whereby he is nowe growne to a most exquisite perfection."*

* A pair of Mollineux's globes are still in the library of the *Middle Temple*. Dalrymple says "the date of the celestial globe

Of the life and parentage of this intrepid navigator very little has been left on record for the benefit of posterity. He has not even found a place in our biographical dictionaries, though an obscure American dissenting clergyman of his name has been thought deserving to be honoured with a niche in this temple of fame.* In the little treatise above-mentioned he calls himself "J. Davis, of Sandrudg, by Dartmouth, Gentleman;" and in vindication of England's knowledge in "horizontall, paradoxall and great circle sayling," he offers himself as a proof from his "briefe treatis of navigation naming it the Seamans Secreats." He also wrote "a rutter, or brief direction for sailing into the East Indies."† Sir W. Monson, who was no friend to the discovery of a north-west passage, admits that both Frobisher and Davis did offer him some very plausible reasons in proof of the existence of such a passage; he throws out a hint at the same time that a more probable attempt might be made by sailing due north across the pole, which if successful, he says, would reduce the passage between England and China to fifteen hundred

" still continues, 1592; but the date of the terrestrial has been visibly altered to 1603 with a pen."—*Mem. of a Map of the Lands around the North Pole*, 1789. It is to be hoped that no other "alterations" have been made, as the discoveries of Davis were marked upon the terrestrial globe under his immediate inspection.

* *See* Gen. Biog. Dict.—*Davies.*

† Prince's Worthies of Devon, vol. i. p. 286.

leagues.* Davis, after his northern discoveries, made several voyages to the East Indies, in the service of the Dutch, some of which have been published,† and prove him to have been a man of nice observation, great sagacity and of sound good sense. He was the first pilot, says Prince, "that conducted the Zealander to the East Indies; they departed from Middleburgh in March, 1598, and in June, 1599, came to Sumatra; where he and some two or three Englishmen more had bad measure shewed them by the Zealanders."‡ "This great navigator," he adds, "made no less than five voyages to the East Indies, and returned home safe again; an instance of a wonderful providence; and an argument that the very same Lord, who is the God of the earth, is the God of the seas."§ No further account is known of this daring navigator except that he was married to Faith, daughter of Sir John Fulford, of Fulford, in Kent, Knt. by Dorothy his wife, daughter of John Lord Bourchier, Earl of Bath.‖ Of the place of his death and interment, and of his descendants, posterity must remain in ignorance.

MALDONADO. 1588.

The name of MALDONADO is well known in the

* Monson's Naval Tracts.

† Two of them by Purchas.

‡ Prince's Worthies of Devon, p. 286.

§ Ibid. ‖ Ibid.

annals of Spanish literature, and was probably selected on this account to cover the gross imposture of ascribing to him a fictitious voyage, in which he is supposed to have effected a passage by the north-west from the Atlantic to the Pacific, and back again the following year. Under the article "Laurent Ferrer Maldonado," in the Bibliotheca Hispana of Nicolas Antonio, we are told that he was well skilled in nautical matters and in geography; that he published a book entitled *Imagen del Mundo*, &c.* and that he (Antonio) had himself seen in the hands of Mascarenas, bishop of Segovia, the manuscript relation of a voyage purporting to be an account of the discovery of the strait of Anian, made by the author in the year 1588.† Antonio de Leon Pinelo also bears testimony to the talents of Maldonado as a navigator, and says, that he presented to the council of the Indies (of which Pinelo was a member) two plans, one of which related to a method of rendering the magnetic needle not subject to variation, and the other, to the finding of the longitude at sea.‡ The Spaniards, in fact, not only acknowledge Maldonado as a navigator and a man of genius, but would appear not wholly to discredit a forgery, which,

* *Imagen del Mundo sobre la Esfera, Cosmographia, &c. comp. apud Joh. Garsiam*, 1626.

† *Relacion del Descubrimiento del Estrecho de Anian hecho por el autor, &c.*—Bibl. Hisp. tom. ii. p. 2.

‡ *Epitome de la Bibl. Orient. &c.* Madrid, 1629.

though not so easily detected at the time it was written, ought not for the last fifty years to have imposed on any one in the least acquainted with the subject of it; and might, indeed, have been detected at the time the voyage was supposed to be made, by an attentive examination. The Spaniards, however, have afforded some countenance to the authority of this pretended voyage, even so recently as the year 1789; for when the corvettes, *la Discubierta* and *l'Atravida*, were dispatched under the orders of Malaspina, to examine the passages and inlets which might be observed to break the continuity of the line of coast of north-west America, between the degrees of 53 and 60 of north latitude, one object of this expedition was "to discover the strait by which Laurent Ferrer Maldonado was supposed to have passed in 1588, from the coast of Labrador to the Great Ocean." This voyage of Malaspina has not yet been published, though long ago said to be in the press; but that this was a main part of the voyage would further appear from a letter of a particular friend of Malaspina's employed on the expedition, who states, that a copy of Maldonado's journal was procured from the Duc de l'Infantado.* We also find, from the Introduction to the Voyage of *Le*

* *Voyage de la Mer Atlantique à l'Océan Pacifique, &c. traduit d'un M. S. Espagnol, par Ch. Amoretti*, 1812. *Plaisance*, 1812.

Sutil and *Mexicana*,* that the commander of this expedition was also furnished with a copy of the manuscript journal of the supposed voyage of Maldonado.

The manner in which this spurious voyage found its way to the public is this:—Amoretti, the librarian of the Ambrosian library at Milan, in his examination of the manuscripts, with the view of publishing such of them (agreeably with the intention of its founder, the Cardinal Borromeo) as should be found to contain new and instructive matter, was struck with the title of a small volume in the Spanish language, importing to be the "Relation of the Discovery of the Strait of Anian, by Laurent Ferrer Maldonado," &c. At first he was disposed to consider it only as a tale to amuse the curious; but on reading it attentively, he found it so strongly marked with the character of authenticity and veracity, that he determined to translate and publish it, with the addition of some notes and a short dissertation to prove that it supported the character of both; and that he was more particularly urged to this step from M. de Humboldt and others having consigned the manuscript, without knowing what it contained, to the mass of geographical impostures. M. Amoretti, however, had one advocate, and but one for the "veracity and

* *Published at Madrid*, 1802.

authenticity" of the voyage in question in the person of M. Buache, the French geographer, who read a memoir on the subject, before the French Academy of Sciences, as far back as 1790. The forgery, however, is incontrovertibly proved from all the circumstances therein mentioned being wholly at variance with our present knowledge of things as they actually exist. It cannot possibly now mislead any one not grossly ignorant of geography; and its numerous anachronisms might have led to its detection even at the time the voyage is stated to have been made; but the truth seems to be that this manuscript, like many others, was locked up among the musty records of the state, and kept so long concealed, that, when again brought to light, it was as new to the Spaniards as to the rest of the world. It evidently appears to have been fabricated many years subsequent to the date of the supposed voyage, as it notices the discoveries of Quiros, which were not known till the year 1607. Captain Burney has conjectured that it is the fabrication of some Fleming, as the reckoning of distances is in German leagues, fifteen to the degree, and not in the Spanish league of 17½ to a degree. As this "Relation" is at any rate a curious document, and has never appeared in the English language, a translation from a Spanish copy of the original manuscript, in the possession of the Duc d'Infantado, will be found in the

Appendix,* which will render any extract of it here, or any further comment, unnecessary.†

JUAN DE FUCA. 1592.

The authenticity of the narrative, given by this person, of a voyage from New Spain for the discovery of the Estrecho d'Anian, rests on better grounds than the voyage of Maldonado. The veracity of the narrator has frequently been called in question, because he happened to be wrong in his conclusions; but the facts of his statement have, in our times, been in so many instances verified, as scarcely to leave a doubt of the reality of the voyage. Besides, the little that we have is at second-hand, and the mere record of a conversation, misunderstood probably in some points, and imperfectly stated in most of them. Under such circumstances, the story of JUAN DE FUCA ought not to be canvassed with the severity of criticism.

The story of this voyage is as follows: Mr. Michael Lok, consul for the Turkey merchants at

* Obtained from Don Filipe Bauza, *Superintendant of the Hydrographical Department in Madrid.*

† The detection of this German imposture may be seen in Burney's Hist. of Voyages; in the Quarterly Review, No. XXXI.; and in Baron de Zach's Journal, by Baron de Lindenau, 1812.

Aleppo, transmits to England a note, of which the following is the substance and nearly a copy. He says, "when I was in Venice, in April 1596, happily arrived there an old man, about sixty years of age, called commonly Juan de Fuca, but named properly Apostolos Valerianus, of nation a Greek, born in Cephalonia, of profession a mariner, an ancient pilot of ships." He then goes on to say, that one John Douglas, an Englishman, brought this man before him, who made the following declaration, in the Italian and Spanish languages:—First, "that he had been in the West Indies of Spain forty years; that he was in the Spanish ship which, in returning from the Philippines towards *Nova Spania*, was robbed and taken at the Cape California by Captain Candish, an Englishman, whereby he lost 60,000 ducats of his own goods; that he was pilot of three small ships sent from Mexico by the Viceroy, armed with 100 men, to discover the straits of Anian, along the coast of the South Sea, and to fortify that strait to resist the attempts of the English to pass into the South Sea; that, however, a mutiny broke out among the seamen, which prevented any thing being done in the way of discovery on that voyage.

Secondly, "that the Viceroy of Mexico sent him out again in 1592, with a small caravel and a pinnace, to follow up the said voyage for the discovery of the straits of Anian, and the passage

thereof into the sea usually called the North Sea; that he coasted along Nova Spania and California until he came to the latitude of 47°, where the land trending north and north-east, with a broad inlet of the sea between 47 and 48 degrees of latitude, he entered therein, sailing more than twenty days, continuing on various courses and passing divers islands within the said strait; that at the entrance of the north-west coast thereof there is a great headland or island, with an exceeding high pinnacle or spired rock, like a pillar thereupon; that he saw some people on the land clad in beasts' skins."

He further stated, "that being entered thus far into the strait, and being come into the North Sea already, and finding it wide enough every where, and 30 or 40 leagues within the mouth of the strait where he entered, he conceived he had now discharged his duty, and returned again towards Nova Spania, where he arrived at Acapulco in the year 1592, hoping for his reward from the Viceroy for this discovery; that, after waiting two years, the Viceroy of Mexico sent him to Spain; that he was welcomed at the king's court, but that he was unable to obtain any satisfactory reward. He therefore stole out of Spain and came to Italy, to go home again and live among his own kindred."

He also said, "that, hoping the Queen of England would do him justice for his goods lost by Captain Candish, he would be content to go into

England, and serve her Majesty in that voyage for the discovery of the north-west passage into the South Sea, if she would furnish him with only one ship of 40 tons burden and a pinnace, and that he would perform it in ninety days time from one end of the strait to the other."

Mr. Lok then states, "that he wrote accordingly to the Right Honourable the old Lord Treasurer Cecil, and to Sir Walter Raleigh, and to Martin Richard Hakluyt, that famous cosmographer, certifying them hereof; and that he only prayed for one hundred pounds to bring the old pilot to England, but that the money was not ready, and the matter was dropped at that time;" that, however, on making preparations for his return to England, Mr. Lok wrote to this old pilot in July 1596, then in Cephalonia, and received an answer from him, dated in September, expressing his willingness to go to England, and adding, that twenty others, good men, were ready to accompany him; but he asks for money, and repeats the charge of Captain Candish having robbed him: Mr. Lok, being some time longer detained in Venice, wrote to him again in 1597, and after that sent him another letter, to which he answered in the Greek language on the 20th October, 1598, that he was still willing to go if money was sent to him to bear his expenses.

"Lastly," says Mr. Lok, "when I was at Zante,

in June 1602, minding to pass from thence for England by sea, for that I had then received a little money, I wrote another letter to this Greek pilot to Cephalonia, and required him to come to me at Zante to go with me into England; but I had no answer thereof from him, for that, as I heard afterwards at Zante, he was then dead, or very likely to die of great sickness."*

The Spaniards deny all knowledge of any such voyage as that mentioned by the old Greek pilot; but this is no ground whatever for calling in question its veracity. Mr. Lok was a public character, and living in England when Purchas printed his narrative; he was also known as the translator of the last five decades of Peter Martyr, which treat of American discovery. Candish himself states, that in the rich Spanish ship called the *Santa Anna*, and taken by him off Cape California, there was a skilful pilot.† But the most powerful argument in favour of the reality of Juan de Fuca's voyage is the subsequent discovery of a strait, on the north-west coast of America, exactly on the spot where the old pilot placed it; within which are islands and broad channels, leading in all the directions as mentioned by him. This strait, it is true, opens through Queen Charlotte's Sound into the Pacific, which the old man mistook

* "Note made by Michael Lok."—*Purchas*, vol. iii. p. 849.

† Candish's Voyage.—*Id.* vol. i. p. 56.

for the great North Sea; and such a mistake is not very surprizing at this early period of navigation, when the instruments were imperfect, and theory had made but little progress, and, it may be added, when men confidently believed that such a communication as he was in search of, between the Pacific and Atlantic oceans, did actually exist.

When, therefore, the late Doctor Douglas so hastily pronounced the story of De Fuca to be "the fabric of imposture,"* he committed an act of great injustice to the memory of the old pilot; for the ink was scarcely dry, which transmitted to posterity this unmerited censure, when the very strait, and the sea within it, and the savages clothed in skins, were all recognized by Meares, and since that by Vancouver and many others, just as they were described by the old Greek pilot to Mr. Lok; and modern geographers, willing to do justice to the memory of the first discoverer of Queen Charlotte's Sound, formed by the archipelago on the west coast of America, between the latitudes of 48 and 50 degrees, have assigned to the southern opening into that sound the name of the *Entrance* or *Strait* of *Juan de Fuca*.

* Introduction to Cook's last Voyage.

CORNELIS CORNELISON, BRANDS YSBRANTS, AND WILLIAM BARENTZ OR BARENTZON. 1594.

No sooner had the Low Countries been delivered from the yoke of Spain, chiefly by the exertions of England, than Dutch capital began to find its way into foreign channels, and a spirit of enterprize to infuse itself into the commercial pursuits of this industrious nation, which, in a very short space of time, raised it to a degree of power and prosperity unequalled at any former period, and scarcely surpassed by that of its deliverers.

Desirous of participating with other maritime powers of Europe in the trade of the East, it was obvious that a passage, which would lead by the north to India and China, would be to them, of all others, the most advantageous. With a view to the discovery of such a passage, the United Provinces set forth, in the year 1594, an expedition, consisting of four ships, whereof two were furnished by the city of Amsterdam, one by Zealand, and one by Enkhuysen; the first, called the *Messenger*, was commanded by BARENTZ; the name of the Zealand ship was the *Swan*, under the command of CORNELISON, who was also appointed Admiral; and the last was the *Mercury*, commanded by YSBRANTS. The ships from Zealand

and Enkhuysen sailed together on the 5th June, reached Kilduyn in Lapland on the 23d, left it on the 2d July, passed Kolgoy on the 3d, and soon after fell in with much ice and numerous seals. Proceeding to the eastward, they found the weather, about the middle of July, as warm as in Holland during the dog days, and the musquitoes were exceedingly troublesome.

On approaching the island and strait of Waygatz or Waigatz, they met with great quantities of drift-wood, and on the shores of the island whole piles of it, heaped up as if by art, some of which were large trees that had been torn up by the roots. The face of the island is described as being covered with verdure, and embellished with a multitude of beautiful flowers. In passing round the south part of the island they observed from three to four hundred wooden idols, of men, women, and children, their faces generally turned towards the east. To this point the Dutch gave the name of *Afgoden hoek* or *Idol Point;* but by the Russians it is called *Waigati Noss*, or *Cape of Carved Images;** and hence the name Waijatz or Waigatz, which by many has been supposed, erroneously as it would seem, of Dutch origin, *wai-gat* signifying in that language *windy* or *stormy strait* or *hole;* but the former is undoubtedly the proper derivation, as the name was known

* Forster's Northern Voyages, p. 413.

to Steven Burough, in 1565, long before any Dutchman had been so far to the eastward.

On passing the strait they continued their course to the eastward, but met with considerable interruption from ice which, at one time, came floating in such quantities as to oblige them to return. But on observing it to separate and disperse by a change of wind and by the current, they again stood on to the eastward until they came into a deep blue sea nearly free from ice. At this time they were not more than forty leagues from Waigatz strait, and the main land to the southward of them was in sight, trending apparently to the south-east. These circumstances gave them such confident hopes of an open passage to Cathaia, that, instead of following up the actual discovery of it, they agreed to turn back, in order to be the first to convey the happy tidings to Holland. They accordingly repassed the strait, gave names to some islands already named, called at Kilduyn, and from thence made the best of their way home, which they reached on the 26th September. This part of the voyage, containing the operations of the two ships which sailed together, is written by H. Van Linschoten; that which follows by Gerrit de Veer.

Barentz, in the Messenger, after crossing the White sea, stood to the north-eastward, and having made the west coast of Nova Zembla on the 4th July, proceeded along it to the northward, giving

the names of *Lanjenes* and *Bapo* to two headlands, and to a good bay, in which he anchored, that of *Lomsbay;* thus named from a species of penguin so called by the Dutch, which was found here in vast numbers.* The latitude of this bay was observed to be 74° ¾. He next passed *Admiral's Island*, Cape *Negro*, *Black Point*, *Williams's Island*, which is in 75° 55′; and on the shores of which was found much drift-wood, and a multitude of sea-horses. Here also they met with a most tremendous white bear of wonderful strength, which, after wounding with musket-ball, they endeavoured to get into the boat by throwing a rope round her; but the bear needed no such assistance, having nearly succeeded in getting into the boat of her own accord and driving all the people therein to the opposite end, when luckily the rope entangled her with the rudder and checked her career; one of the crew at this moment, emboldened by her helpless situation, stepped aft and put her to death with a half-pike.

From hence they still proceeded northerly, passing the *Island of Crosses* and *Point Nassau*, and came to an extensive field of ice about the lat. 77° 25′, of which they could see no end from the top.

* *Purchas*, following the old translator *Phillip*, transforms these birds into "a certayne kinde of beares." vol. iii. p. 474. But a French editor has made a more absurd mistake, by metamorphosing the puffins, or "the northern parrots" of the Dutch into *St. Louis. Hist. Gén. des Voy.* tom. xxii. p. 128.

Returning to the southward they named the nearest point of Nova Zembla in sight *Ice Point*, lying in lat. 77°; and here they found certain stones that glistened like gold, which on that account they named Gold-stones. Farther south they gave the name of *Orange* to certain islands, on the shore of one of which they saw about two hundred sea-horses basking themselves in the sun, which they attacked with hatchets, cuttle-axes (cutlasses), and pikes, without being able to kill one of them, but had recourse to the cruel expedient of striking some of the teeth out of their mouths. The morse, walrus, or sea-horse, is not better described by Cook, than we here find it by De Veer: "This sea-horse is a wonderful strong monster of the sea, much bigger than an oxe, which keepes continually in the seas, having a skin like a sea-calfe, or seale, with very short hayre, mouthed like a lion, and many times they lye upon the ice; they are hardly killed unlesse you strike them just upon the forehead; it hath four feete, but no eares, and commonly it hath two young ones at a time. And when the fishermen chance to finde them upon a flake of ice with their young ones, shee casteth her young ones before her into the water, and then takes them in her arms, and so plungeth up and downe with them; and when she will revenge herselfe upon the boates, or make resistance against them, then she casts her young ones from her againe, and

with all her force goeth towards the boate, (whereby our men were once in no small danger, for that the sea-horse had almost stricken her teeth into the sterne of their boate,) thinking to overthrow it, but by meanes of the great crie that the men made, she was afraide, and swomme away againe, and tooke her young ones againe in her armes. They have two teeth sticking out of their mouthes, on each side one, each being about halfe an ell long, and are esteemed to bee as good as any ivorie or elephant's teeth."*

The ice now came floating down in such quantities, and the weather was so misty, cold and tempestuous, that the crew first began to murmur and then refused to proceed any farther. Accordingly on the 1st August, Barentz consented to return to the southward, by the same way they had advanced. In coasting along till they came into lat. 71° 33′, a large inlet was discovered which Barentz judged to be the place where Oliver Brunel† had been before, called *Costine sarca.* They landed farther south on *Sion's Point*, where they perceived some Europeans must have been, for they there found six sacks of rye-meal, a cross, a heap of stones, and a large cannon shot, and three houses built of wood, near which stood five or six coffins

* Three Voyages made by the Dutch into the Northern Seas. *Trans. by Phillip*, 1607.

† An Englishman, of whom a vague mention only is made by the Dutch.

by graves with dead men's bones, the coffins filled with stones. They also discovered the wreck of a Russian ship with a keel forty feet long. To this "faire haven" they gave the name of *Meal-harbour*, in gratitude for the relief it afforded them. On the 15th they arrived at the two islands called *Matfloe* and *Delgoy*, where they met with the Zealand and Enkhuysen ships, which had repassed Waigatz strait, on their return, the same day, and from whom they learned that the latter had been as far to the eastward, according to their conjecture, as the river Obe; that they were not far from Cape *Tabin*, which is the point of Tartary that reached towards the kingdom of Cathaia, and that, south-east from Waigatz, they had discovered a small island, to which they gave the name of *Staaten Island*, and that "there they found many stones that were of christall mountayne, being a kind of diamond." From hence the three ships set sail together, and arrived in the Texel, as before mentioned, on the 16th September.

WILLIAM BARENTZ—*Second Voyage.* 1595.

Prince Maurice and the States-General of the United Provinces entertained the most sanguine hopes, from the report of Linschoten in particular, of an eastern passage to China. They accordingly caused a fleet of seven ships to be fitted out for

the new expedition, six of which were laden with divers kinds of wares, merchandizes, and money, and factors appointed to dispose of the said wares; of these Jacob Van Heemskerke was the chief; and WILLIAM BARENTZ was constituted pilot-major—the seventh vessel was a small pinnace, which, on reaching Cape Tabin, was to proceed to examine the remainder of the passage, and bring back news thereof. These immense preparations were altogether rendered nugatory by the tardy movement of the machine. It was the 2d July before the expedition left the Texel, and it did not reach the coast of Nova Zembla before the 17th August, a period of the year at which it ought, if successful, to have been at least the length of the Aleutian islands in the Pacific. They now found, as might have been anticipated, the coast of Nova Zembla unapproachable on account of the ice. Turning therefore to the southward, they passed Waigatz, and landed on the northern shore, but could find neither men nor houses; but on the 23d, they fell in with a Russian lodgie or boat of Petchora, sewed together with ropes, in quest of sea-horses' teeth, train oil, and geese. Their ships, they said, to which their boat belonged, were to come out from the coast of Russia to fetch them, then to sail by the river Obe, to a place called Ugoleta, in Tartary; that it would be nine or ten weeks before it began to freeze, but when it once began it would freeze so hard that men might pass over the ice to Tartary.

On the south side of Waigatz, they had some intercourse with the Samoyeds, whose appearance and manners are described at considerable length; and from them they learned that five days sailing from thence to the north-east would bring them to a point of land, beyond which there was a great sea stretching to the south-east. This was considered as joyful information, as it fell in exactly with their notions of the direction of the passage to Cathaia. They parted with these people on friendly terms, but the Dutch having taken into their boat one of the carved images, a Samoyed came after them to fetch it, and found means of signifying that they had not done well in carrying it off, on which it was returned, and the Samoyed carried it to a hill and replaced it among several hundreds of the same kind.

Some of the crew had landed on the main shore to seek for stones, which are stated to be a kind of diamond; and as two of the men were lying together, "a greate leane white beare came suddenly stealing out, and caught one of them fast by the necke, who, not knowing what it was that tooke him by the necke, cryed out and sayd, 'Who is that that pulls me so by the necke?' wherewith the other, that lay not farre from him, lifted up his head to see who it was, and perceiving it to bee a monstrous beare, cryed out and sayd, 'Oh mate! it is a beare!' and therewith presently rose up and ranne away." The bear is said to

have instantly "bit his head in sunder and suckt out his blood;" and on being attacked by about twenty people, some with pikes, and others with muskets, she turned furiously upon the party, seized upon one of them, whom she tore in pieces, and all the rest ran away. The people on board, perceiving what had happened, went on shore, and about thirty made an attack on this furious animal. The purser shot her in the head between the eyes, which did not oblige her to let go her hold of the dead man, but she lifted up her head with the dead man in her mouth; on perceiving, however, that she began to stagger, the purser and a Scotchman drew out their cutlasses and struck her with such force that both broke; still she held fast her prey, till one William Geysen felled her to the ground by striking with all his might with his piece upon her snout, when they contrived to dispatch her, by cutting her throat.

Finding it impossible, on account of the great quantity of ice, to make any progress in the Tartarian sea, and "the weather being mistie, melancholy, and snowie," they drove with the current back again through the strait, and on the 15th September the whole fleet took their departure from Waigatz; on the 29th they entered Wardhuys, from whence they sailed again on the 10th October, and on the 18th November arrived in the Maes.

WILLIAM BARENTZ—*Third Voyage.* 1596.

After this luckless voyage, for which such great and unnecessary expense and preparations had been made, the States-General seemed to have felt no inclination to renew the attempt for the discovery of a north-east passage; but they, nevertheless, issued a proclamation, holding forth a certain reward to such person or persons as should accomplish a voyage to China by this route. Upon the strength of this encouragement, the merchants of Amsterdam fitted out two ships, one of which was commanded by Jacob Van Heemskerke, and WILLIAM BARENTZ appointed chief pilot; and the master of the other was Cornelis Ryp. They sailed from Amsterdam on the 10th of May. On the 1st of June they had no night, and on the 4th, in lat. 71°, a strange sight appeared in the heavens. It was two parahelia or mock suns, which are thus described: —"on each side of the sunne there was another sunne and two raine-bowes, that past cleane thorow the three sunnes, and then two raine-bowes more, the one compassing round about the sunnes, and the other crosse thorow the great rundle; the great rundle standing with the uttermost point elevated above the horizon 28°." In the original Dutch voyage, by De Veer, a figure is given of the three suns and the rain-bows.*

* *Waerachtighe Beschriv. van de drie Seylagien*, &c.

On the 5th they fell in with the first ice, which, being in fleecy detached pieces, some of the crew mistook for white swans. On the 7th they were in lat. 74°, sailing through the ice "as if betweene two lands." On the 9th they came to *Bear* (afterwards *Cherry*) island; and here they killed a bear, whose skin measured twelve feet in length. On the 19th they found, by observation, that they had reached the lat. 80° 11′; at which time they had much land to the eastward. On this coast, after a hard fight, they killed another bear, whose skin was thirteen feet long. On a small island they found multitudes of eggs of certain red geese; the birds, when driven away, cried *rot, rot, rot.** "Those geese were of a perfit red colour, such as come into Holland about Weiringen, and everie yeere are there taken in abundance, but till this time it was never knowne where they hatcht their egges; so that some men have taken upon them to write that they sit upon trees in Scotland, that hang over the water, and such egges as fall from them downe into the water become young geese, and swim there out of the water; but those that fall upon the land burst in sunder, and are lost." This fable of the barnacles is thus, in the opinion of De Veer, for the first time refuted; and, he continues, "it is not to be wondered at, that no man could tell where they breed their egges, for

* That is, *red, red, red.*

that no man that ever wee knew had ever been under 80°: nor that land under 80° was never set down in any card, much lesse the red geese that breed therein." This is, unquestionably, the first discovery of Spitzbergen; and it is further observed, and very truly, that "there groweth here leaves and grasse, yet in Nova Zembla, under 76°, there groweth neither leaves nor grasse;" and such is the providence of nature in the appropriation of the animal to the vegetable kingdom, that while the more southern climate of Nova Zembla produces only carnivorous animals, the northernmost part of Spitzbergen is supplied with herbivorous deer.

He does not exactly state that they were unable to proceed higher to the northward, though a good deal of ice appeared around them. By their latitude it would seem they were off *Amsterdam island*, on which is that famous foreland, since so well known to whalers under the name of *Hakluyt's headland*. The variation of the compass was found to be 16° W. From hence they steered south-west to avoid the ice, and on the 1st of July were again opposite to Bear island. Here the ships mutually agreed to part company, Jan Cornelis being of opinion that he should find a passage to the eastward of that land which lay under 80°, and accordingly returned to the northward; while Jacob Van Heemskerke, or rather his pilot, Barentz, deeming it more likely to find the passage to the eastward, in a lower parallel, steered for Waigatz Strait.

The latter vessel, after a long passage, occasioned by bad weather, contrary winds, and much floating ice, reached the coast of Nova Zembla on the 17th of July, about Lomsbay. She then stood to the northward as near to the land as the ice would permit, and on the 20th Barentz found, by observation, that they had reached the lat. 76° 15′. It was not before the 6th of August that they succeeded in doubling point Nassau; and the wind being from the east they were glad to make fast the ship to a mass of ice thirty-six fathom under water, and sixteen fathom above it; this ice-berg is stated to have suddenly been rent in pieces, "for with one great cracke it burst into foure hundred pieces at the least." Besides this mass, the sea was covered with flake ice and various other ice-bergs, but none quite so large. It was in vain they struggled to get to the eastward; the wind blew strong from that quarter, bringing with it immense patches of ice. Finding all their attempts ineffectual, they were at length reluctantly compelled to return; the ship, indeed, was generally beset in the ice, and, while drifting with it, the rudder was broken in pieces, the boat crushed flat between the ice, and they expected every moment that a similar fate would befall the ship. It was now evident that every hope was cut off, not only from the possibility of proceeding farther to the eastward, but also of reaching Waigatz by the eastern coast of Nova Zembla; they therefore

attempted to get back by the way they had come. On the 26th, with great exertion, they had so far succeeded as to reach the western side of *Ice-haven*, but it had nearly been to them a fatal success; for, in this dismal spot, "we were forced," says De Veer, "in great cold, povertie, miserie and griefe, to stay all that winter."

The prevailing north-easterly winds brought into the bay such prodigious quantities of ice, that the ship, had she even sustained no previous damage, could by no possibility have been moved out of the bay that season: but, lifted up as she was between heaps of ice, bruised and bilged, with her rudder torn off, very little hope remained that she would ever again be got afloat. The unhappy crew, therefore, determined at once to abandon the ship, and to prepare for passing the winter in this cold and dreary spot; and luckily for them they found, at no great distance, a sufficient quantity of drift-wood, not only to build them a capacious house, but also to serve them for fuel. The party, thus doomed to the melancholy fate which awaited them, amounted to seventeen persons, of whom one, who could least be spared, the carpenter, died the first week, and another was taken ill. They contrived, however, to build their house, but, De Veer says, it was so dreadfully cold "that, as wee put a naile into our mouthes, (as carpenters use to do,) there would ice hang thereon when wee tooke it out againe, and make the bloud follow." The journal of the proceedings of these poor people

during "their cold, comfortlesse, darke and dreadful winter," is intensely and painfully interesting. No murmuring escapes them in their most hopeless and afflicted situation; but such a spirit of true piety, and a tone of such mild and subdued resignation to Divine providence, breathe through the whole narrative, that it is impossible to peruse the simple tale of their sufferings and contemplate their forlorn situation, without the deepest emotion for the unhappy fate of so many wretched beings, cut off from all human aid, and almost from all hope of their ever being able to leave their dark and dismal abode.

On the 4th of November the last feeble rays of the sun took leave of them; and from that time the cold was observed progressively to increase, till it became so intense as to be nearly beyond endurance. The wine and beer they had saved out of the ship were presently frozen and lost all their strength; excepting a small portion of each that still remained liquid, but which was not drinkable. By means of large fires of wood, by placing heated stones to their feet, and using double clothing and fox-skin caps on their heads, they were just able to keep themselves from being frozen; but it was a dreadful task to go out in search of drift-wood, and to haul it on a sled for a considerable distance over ice and snow, and sometimes in such dark and piercing weather as to take the skin off their hands and faces. They once had recourse to the

coals on board the vessel, but the fire made with these had nearly suffocated the whole party. Their clock soon became frozen, and it was then necessary for some of them, by turns, constantly to watch the hour-glass, that they might not mistake the time. Being frequently attacked by bears, which assaulted their wooden hut, and opposed them whenever they stirred abroad, they found means to kill several of these ferocious animals, and used their fat for their lamps; from a single bear they extracted about a hundred pounds of grease. Finding the liver of this animal palatable food, they eat heartily of it, but it made them all sick; and three of the party were so ill, in consequence thereof, that the skin came off their bodies from head to foot.

It deserves to be remarked, that when the sun disappeared, the bears immediately took leave of them; and their place was as speedily supplied by white foxes, which came in great abundance, and served them both as food and clothing, their flesh tasting like that of rabbits. By setting traps on the roof of their house, they caught abundance of these useful animals; but immediately after the re-appearance of the sun, the foxes took their departure and the bears again renewed their visits.

When the 19th of December arrived these unhappy men began to receive consolation at the thought that half the total absence of the sun had now been got over. Miserable as their situation

was, and to all appearance perfectly hopeless, they could even jest and make themselves merry. "On Christmas-day," says the writer, "it was foule wether, with a north-west wind, and yet though it was foule wether we heard the foxes run over our house, wherewith some of our men said it was an ill signe; and while we sate disputing why it should be an ill signe, some of our men made answere that it was an ill signe because we could not take them to put them into the pot to rost them, for that had beene a very good signe for us." And after labouring hard all the day of the 5th of January in digging away the snow that had for several days blocked up their door, and cleaned out their hut, "we remembered ourselves," says the narrator, "that it was Twelfth-even, and then we prayed our Maister that we might be merry that night, and said that we were content to spend some of the wine that night which we had spared, and which was our share every second day, and whereof for certaine daies we had not drunke; and so that night we made merry and drunke to the three kings, and therewith we had the pound of meale whereof we made pancakes with oyle, and every man a white bisket, which we sopt in wine: and so supposing that we were in our owne country and amongst our friends, it comforted us as well as if we had made a great banket in our owne house; and we also made tickets, and our gunner was king of Nova Zembla, which is at

least two hundred miles long, and lyeth betweene two seas."*

The raptures felt by these unhappy men at the first blush of the sun may easily be conceived. This joyful event was first announced to them about the 16th of January, when they perceived "a certaine rednesse in the skie," though William Barentz convinced them that the sun himself would not make his appearance above the horizon for three weeks yet to come. However, on the 24th of January, "it was faire cleare weather," says Gerrit de Veer, "with a west wind; then I and Jacob Hemskerk, and another with us, went to the sea-side, on the south side of Nova Zembla, where, contrary to our expectation, I first saw the edge of the sunne, wherewith we went speedily home againe to tell William Barentz and the rest of our companions that joyful newes. But William Barentz, being a wise and well experienced pilot, would not believe it, esteeming it to be about forteen daies too soone for the sunne to shine in that part of the world; but we earnestly affirmed the contrary, and said that we had seen the sunne." On the two following days they had thick and foggy weather, but on the 27th it was clear; "and then," says the journalist, "we saw the sunne in his full roundnesse above the horizon, which made us all glad, and we

* *True and perfect Description of Three Voyages, so strange and wonderfull that the like hath never been heard of before.* Trans. by William Phillip. London. 1609.

gave God hearty thankes for his grace shewed unto us, that that glorious light appeared to us againe." Their joy, however, was somewhat damped by the death of their sick companion on the preceding day.

The accuracy of the Dutch journalist, respecting the re-appearance of the sun, has been called in question by most philosophers and astronomers who have adverted to this account, but it has also had its defenders. It is possible, and indeed not improbable, that after the freezing of the clock, and in the darkness of a long night, they might have lost some time, however much they were interested in marking even the hours as they passed away—but so very few observations have yet been made in high latitudes, on atmospherical refraction, that a circumstance stated with so much honesty and simplicity in a daily journal, should not, perhaps, be rejected as untrue, because it is uncommon. Under ordinary circumstances of refraction the appearance of the sun would seem to have been premature by seven or eight days.

The bears did not fail to return with the light of the sun, and were now, if possible, more than ever troublesome after their long sleep; the cold became more intense as the days lengthened, the frost more severe, and the snow more frequent, so that it was the month of June before they could set about repairing their two boats, and fitting them for a long voyage from their dreary place of residence. To repair the ship was out of the question, as she

was completely bilged and still fast in the ice. On the 13th of that month every thing was in readiness for their departure; previous to which a statement was drawn up in writing by Barentz and left in the wooden house, containing their names, detailing their late misfortunes and what had befallen them in that wretched abode; after which, committing themselves to the will and mercy of God, they left their *Icy haven* in the two open boats, with a view to return the way they had come, along the western shore of Nova Zembla. They had not proceeded far, however, before a misfortune befell them which overwhelmed them all with grief and despair. Poor Barentz, in whom all their confidence had rested, died on the 20th of June; being ill when they left their house, he, and another of the name of Claes Adrianson, had been obliged to be taken to the boats on a sledge. On being told that Adrianson was so sick that he could not live, William Barentz spake and said, "I thinke I shal not live long after him"—he then said to De Veer, "Gerrit, give me some drinke; and he had no sooner drunke but he was taken with so sodain a qualme that he turned his eyes in his head and died." The same day Adrianson died also.

There are numerous instances on record of extraordinary voyages being performed in rough and tempestuous seas in open boats, with the most scanty supply of provisions and water, but there is probably not one instance, that can be

compared to that in question, where fifteen persons, in two open boats, had to pass over a frozen ocean more than eleven hundred miles, "in the ice, over the ice, and through the sea," exposed to all the dangers of being at one time overwhelmed by the waves, at another of being crushed to atoms by the whirling of large masses of ice, and to the constant attack of ferocious bears, enduring for upwards of forty days severe cold, fatigue, famine and disease; and yet, excepting the two who died, and who entered the boats in a state of sickness and debility, the rest arrived in good health and spirits at Cola, where they had the satisfaction of meeting with their old friend and companion Jan Cornelis Ryp, who had deserted them to go to the northward the year before. They had learned, indeed, at Kilduyn, that three Dutch ships were at Cola; and a Laplander, whom they sent over land, returned with a letter from Cornelis Ryp; but they could scarcely flatter themselves that it was the same who had sailed with them from Holland. He now took them on board his ship, and, on the 29th of October, they all arrived safely in the Maes, to the great joy of their friends, who had given them up for lost.

To what extent of northern latitude Cornelis Ryp had proceeded the preceding year, or what adventures he met with, or discoveries he made, is no where stated; but as he set out with the intention of sailing along the eastern side of the land

they had before coasted to the 80° of latitude, it is probable he circumnavigated Spitzbergen, in which case he must have reached the 81st degree of northern latitude.

The three voyages of Barentz are written by Gerrit de Veer, who was on all of them; the first two have also been published by Linschoten, who enters into more nautical details, and gives views of the land and charts of the bays, harbours, headlands, &c.; but the deepest interest attaches to the last voyage, of which it is to be regretted there is no good translation in the English language.

WILLIAM ADAMS. 1596.

Purchas, in his "Pilgrimes," stoutly asserts the honour of the first discovery of Spitzbergen and Nova Zembla to be due to our countrymen, Sir Hugh Willoughby and Steven Burough; and though he avows his partiality for the Dutch, who "in the glory of navigation are so neere us, and worthie to be honoured," yet it is most true, he adds, that "the English hath beene the elder brother, a doctor and ductor to the Hollanders, in their martiall feats at home, and neptunian exploits abroad."* To a certain extent this is unquestionably true. In all their early foreign voyages they

* Purchas his Pilgrimes, vol. iii. p. 461.

engaged Englishmen as their pilots. We have seen in the preceding voyages of Barentz, that in facing the ferocious bear, a Scotchman was one of the most stout-hearted of the party; and the Dutch themselves admit, that an Englishman of the name of Brunell or Brownell, "moved with the hope of gain, went from Enkhuysen to Pechora," where he lost all by shipwreck, after he had been on the coast of Nova Zembla, and given the name of Costin-sarca (qu. *Coasting-search?**) to a bay situated in about 71½°; but it does not any where appear, and the brief journal of Sir Hugh Willoughby by no means sanctions such a supposition, that this ill-fated commander was ever within many degrees of Spitzbergen: the discovery of this land is certainly due to the Dutch. It might not have been suspected, however, from De Veer's account of Barentz's three voyages, that the extraordinary man, whose name stands at the head of this section, was one of the Englishmen employed on one or more of those voyages. It is very probable, however, that the fact is so, and that, in the year 1596, he accompanied Cornelis Ryp to Spitzbergen. There can be no doubt of his having lived some time in Holland and been in the practice of piloting Dutch ships; though, in the short account he gives of himself, in his two letters addressed to his wife from Japan,

* Forster thinks, *Constant-search*.

he is silent on this subject.* It could not, however, be any other than himself who gave the narrative, which follows, to the Portugueze jesuits at the court of Japan; for his good friend Timothy Shelton of London, who, he tells us, was pilot of the Admiral, was lost in that ship, and Thomas Adams, his brother, was slain in battle.

It is well known that WILLIAM ADAMS was engaged as master-pilot of a Dutch fleet of five ships, bound on a voyage to the East Indies through the strait of Magellan, which circumstance alone proves that his character must have been well established in Holland. We know also that the only vessel which escaped shipwreck was that in which he was pilot; and that it was saved only to be cast away on the coast of Japan; that through the favour which he found in the eyes of the Emperor, on account of his skill in building ships, and instructing his people in mathematics and navigation, he was the means of introducing both the English and the Dutch to trade with that empire; and that he was never permitted to leave the country.†

" Now it is mentioned incidentally in the records of Portugueze navigation, that an Englishman had performed a voyage to the northward, to a

* Purchas's Pilgrims, vol. i. p. 125.

† Purchas's Pilgrims, ibid.—Harris, Coll. of Voy. vol. i. p. 856—Astley, Coll. &c.

degree of latitude beyond that which at this period had ever been attained; and though no name is given, yet it is evident, from the exact date and other circumstances, that this Englishman could have been no other than William Adams.

Diogo de Couto,* in detailing the disastrous circumstances of the expedition sent by the Dutch round Cape Horn, in the year 1598, under the Vice-admiral Simon de Cordes, observes, that one of the ships was driven by a storm on the coast of Japan, having lost by a contagious disease her Captain, whom he calls Corda, and one hundred and fifty men; only twenty-five remaining alive, who had more the appearance of corpses than of living beings, and utterly unable to manage the ship. "The pilot of this ship," says Couto, "was an Englishman, a good cosmographer, and with some knowledge of astrology. He averred to the jesuits at Meaco, that the Prince of Orange had on several occasions employed him on services of much importance; and particularly in the years 1593, 1594, and 1595, he sent him to discover the route above Biarmia and Finmarchia for his ships

* Diogo de Couto, Decad. xii. Chap. 2.—The Author is indebted for this passage in Couto, and for the account of the Cortereals, to his highly esteemed friend Thomas Murdoch, Esq. of Portland Place, whose extensive acquaintance with Spanish and Portugueze literature would, and it is to be hoped will, enable him to favour the public with many hidden treasures in those languages.

to proceed to Japan, China, and the Moluccas, to procure the riches of those islands; considering this route not only much shorter, but also much safer from our corsairs: and that the last attempt was made in 1595, (probably 1596,) when he reached eighty-two degrees north; and although it was in the middle of summer, and the day almost continual, as there was no night, except for about two hours,* yet was the cold so excessive, with so much sleet and snow driving down those straits, that he was compelled to return. And he asserted, that if he had kept close to the coast of Tartary, on the right hand, and had run along it to the eastward, to the opening of Anian, between the land of Asia and America, he might have succeeded in his undertaking."

"And this pilot further said, that the Dutch would not abandon the attempt until they should accomplish their object, on account of the great importance they attached to this route."

"And the English have already attempted to discover this route towards the west, between the islands of Grotland (Greenland) and the land of Labrador; but on account of the same difficulties

* Couto must have mistaken the jesuits, or the jesuits Adams, in relating this part of the story, as the latter well knew there could be no night for upwards of four months in such a latitude. From a want of making due allowance for the extraordinary refraction in high latitudes, most of the old navigators have carried Spitzbergen a full degree higher than it is.

they have returned, as did that great navigator Gavot (Cabot) more than forty years ago."

"And on a globe which this English pilot had, (of which a copy was made in China,) these two routes, by which they attempted to pass, are distinctly seen;* and also, in their proper latitudes, the islands of Japan, with all their kingdoms, even to the land of Chincungu, where the rich silver mines are said to be."

"This pilot added, that when the Prince of Orange found that he could not effect the passage by those northern regions, he equipped the fifteen ships, along with which he had sailed."†

It may be observed, that Couto resided in India upwards of forty years, and there wrote his Decadas; he could therefore know nothing more of the attempts to discover a northern passage to India than what he heard from report.

* We have seen that the track of Davis was laid down on the globes made by Emery Mullineux, many years before Adams left England.

† Diogo de Couto, Decad. xii. Chap. 2.

CHAPTER III.

VOYAGES OF DISCOVERY IN THE NORTHERN REGIONS DURING THE SEVENTEENTH CENTURY.

George Weymouth — James Hall, 1st, 2d, and 3d Voyages — John Knight — Henry Hudson, 1st, 2d, 3d, and 4th Voyages—Sir Thomas Button—James Hall, 4th Voyage —Captain Gibbons — Robert Bylot—Bylot and Baffin —Voyages of a mixt character between 1603 and 1615 —Jens Munk — Luke Fox—Thomas James—Zachary Gillam — Wood and Flawes.

GEORGE WEYMOUTH. 1602.

SEVERAL years had passed away without any new attempt being made, on the part of the maritime nations of Europe, to discover a nearer passage by the north to India and China. The English, however, could not see with indifference a lucrative commerce carried on with the eastern world by the Spaniards and Portugueze without endeavouring to enjoy a participation thereof. The successful expeditions of Sir Francis Drake in 1578, and of Candish in 1586, had sufficiently proved to the nation the great value of oriental commerce. The several attempts to establish a share of that commerce by a shorter route than those of the Cape of Good Hope or Cape Horn having failed, the mer-

chants of London determined to try their fortune by the former of these known passages; not, however, so much with the view of forming a legitimate trade with the natives of the East, as of obtaining wealth by the more cheap and expeditious mode of plundering the Portugueze. With this design, Captain George Raymond, having fitted out a ship of his own, called the Penelope, and accompanied by two others, the Merchant-Royal and Edward Bonaventure, set sail in 1591 for the East Indies. The voyage, however, was most disastrous. The Royal-Merchant returned from the Cape full of sick men. The Penelope had scarcely doubled the Cape when she was lost; and the Edward Bonaventure, commanded by Captain James Lancaster, after an unsuccessful voyage, was lost on her return, in the West Indies. But Lancaster sent home, or is supposed to have sent home, a piece of information, which gave a new stimulus to northern discovery. In a postscript to one of his letters, he says, "The passage to the Indies is in the north-west of America, in 62° 30′ north." But this postscript, then believed to be genuine, has since been supposed to be an interpolation.*

It served, however, to revive the hopes of the mercantile part of the nation; and, in 1602, the worshipful merchants of the Muscovy and Turkey Companies fitted out, at their joint expense,

* Burney's Voyages and Discoveries.

an expedition intended solely for the discovery of a north-west passage towards China. It consisted of two fly-boats, the one of seventy tons, named the *Discovery;* the other of sixty tons, called the *Godspeed*—the two carrying five and thirty men and boys, and victualled for eighteen months. The command of the expedition was entrusted to Captain GEORGE WEYMOUTH, who, for the better success of the voyage, as he tells us, was provided with "a great traveller and learned minister, one master John Cartwright."

They departed from Radcliffe on the 2d May, 1602. On the 18th June, in lat. 59° 51′ N. they fell in with the first island of ice, stretching to the northward beyond the reach of sight; and on the same day saw the south part of Greenland. In standing to the westward the sea was perfectly smooth, but the water so black, "and as thicke as puddle," that they conceived it to be very shallow; on heaving the lead, however, "they could fetch no ground with one hundred and twenty fathoms." On the 28th they saw land in lat. 62° 30′ which they thought to be the land of America, but it was only *Warwick's Forland* on *Resolution* island. In proceeding to the westward they passed several banks of ice, and again fell in with black water, occasioned probably by the soil which the ice-bergs frequently bring away in their disruption from the land. Again they supposed that they discovered America in lat. 63° 33′, but they could

not approach it on account of the vast quantity of ice which encircled the shore. Proceeding to the north-west they passed four islands of ice "of a huge bignesse;" the fog became so thick that they could not see two ships' lengths from them, and the sails, ropes, and tackle, were frozen so stiff that they were unable to handle them. The thick fog is represented to have frozen as fast as it fell, in the middle of July, and the stiffness of the ropes and sails made them useless. On the 19th of this month, the crews conspired secretly together, while the captain was asleep, to bear up for England, and keep him confined to his cabin, but he discovered the plot in time to prevent it. They stated their reasons in writing, which were these, "That if they should winter between 60° and 70° lat., it would be May before they could attempt any thing, and that by the 1st May the following year they could be in those latitudes well fitted and fresh from England; but that they were willing to encounter any danger in making discovery, either in 60° or 57° of latitude." And after this, they accordingly, "one and all," bore up the helme and steered to the southward. The captain, however, had the resolution to punish the ringleaders most severely, and only remitted a part of the punishment at the intercession of Master Cartwright the preacher, and of the master. Being near to an island of ice, the boats were sent to load some of it for fresh water, but as they were break-

ing some of it off, "the great island of ice gave a mightie cracke two or three times, as though it had been a thunder-clappe; and presently the island began to overthrow, which was like to have sunk both our boats."*

An inlet is described in 61° 40′, not much pestered with ice, and forty leagues broad, within which Weymouth says he sailed a hundred leagues west and by south, but which we now know must have been impossible. Indeed the whole account of Weymouth's proceedings is so confused, that little or nothing can be drawn from it, except that he was among the islands to the northward of Hudson's Strait, and probably those of Cape Chidley; and though he calls every land he fell in with the "land of America," it is quite clear that he never came near the American coast, except that part of it which is known by the name of Labrador, along which he continued to range from the 5th to the 14th July, when he discovers an inlet in lat. 56°, up which he sailed thirty leagues, entertaining sanguine hopes of a passage through it: this inlet corresponds with Sleeper's Bay, or Davis's Inlet. On the 5th August he arrived at Dartmouth.†

The voyage of Weymouth was a complete failure. He reached no higher than lat. 63° 53′; "hee neither discovered," says Luke Fox, "nor

* Purchas his Pilgrimes, vol. iii. p. 812.

† *Ibid.* p. 814.

named any thing more than Davis, nor had any sight of Greenland, nor was so farre north; nor can I conceive he hath added any thing more to this designe; yet these two, Davis and he, did, I conceive, light Hudson into his straights."*

JAMES HALL—*First Voyage.* 1605.

Hitherto the nation which might be supposed to be the most interested in prosecuting discoveries in the arctic seas, along the two coasts of Greenland, had seen the repeated enterprizes of the English in those seas with apparent indifference. Roused at length, however, to a sense of the propriety, but more so, perhaps, of the importance of northern discovery, the king of Denmark caused an expedition to be fitted out for exploring Greenland. It consisted of two ships and a pinnace; one of which, the Admiral, was called the *Frost*, of the burden of thirty or forty lasts, commanded by John Cunningham, a Scottish gentleman in the service of the king, and on board of which was JAMES HALL, an Englishman, acting as principal pilot: the other ship was the *Lion*, Vice-admiral, of the same burden, commanded by a Dane; and the pinnace of twelve lasts was under the command of John Knight, also an Englishman. The

* North-west Fox, p. 50.

whole expedition was placed under the orders of Admiral Godske Lindenau. They sailed from Copenhagen on the 2d May, 1605. On the 24th, being in lat. 59½° they expected to have seen Buss island, and conclude it to be laid down in a wrong latitude on the charts. On the 30th they saw the south point of Greenland, which, out of compliment to the King of Denmark, they named *Cape Christian*. To avoid the ice, which encompassed the shore, they stood to the westward, and fell in with "mighty islands of ice, being very high, like huge mountains," making a hideous and wonderful noise; and on one of them was observed "a huge rocke stone, of the weight of three hundred pounds or thereabouts." Finding nothing but ice and fog, from the 1st to the 10th June, the Lion's people hailed the Admiral, "calling very fearfully, and desiring the pilot to alter his course, and return homeward." The alarm spread in the Admiral's ship, and they would have determined to have put about, had not Cunningham, the captain, protested he would stand by Hall, "as long as his blood was warme, for the good of the king's majestie." This pacified them for a moment, but the next floating island of ice renewed the terrors of those on board the Lion, who having fired a piece of ordnance, stood away to the southward.

On the 12th the Admiral fell in with the coast of Greenland, and gave the names of *Mount Cun-*

ningham, Queen Anne, and *Queen Sophia's Capes,* to certain portions of the land; and entering a deep bay, which they called *Christian's Fiord,* a party landed and examined some tents of the natives covered with seal skins; and within, among other articles, some vessels were observed boiling over a little lamp, in one of which was found a dog's head boiled, "so that I persuaded myself," says Hall, "that they eate dog's flesh." The latitude of the anchorage was found by observation to be 66° 25′. The natives presently came off to the ship in their boats, and bartered whale-bone, seal-skins, morse teeth and unicorns' horns for nails and pieces of old iron. But on reaching the shore they began to hurl stones at the strangers with their slings "in such sort, that no man could stand upon the hatches." The Danes, however, succeeded after some time in dispersing them by the fire of musketry; but they assembled again in greater force than ever, having upwards of seventy boats, and not less than 300 persons on shore. The wind luckily became easterly, on which the pinnace steered out to sea, and coasting along the shore to lat. 69°, they found many goodly sounds, bays, and rivers, and gave names to divers of them; they met with much drift-wood, "but whence it cometh," observes Hall, "I know not." Hall would have proceeded farther to the northward, but the people in the pinnace earnestly entreated him to return, saying that their companions in the

Admiral would mutiny and leave them behind, which in fact they had nearly done. They found, on their return, that the people of the ship had been engaged in fight with the natives, of whom several were slain and three taken prisoners.

Before they departed from *Frost Sound* they turned on shore two Danish malefactors, whom they had brought out for that purpose by order of the Court, with certain necessaries; "and thus," says Hall, "having committed both the one and the other to God we set saile homewards." They passed down Davis's Strait with a rapid current in their favour, and anchored on the 10th August off the castle of Elsineur.

It would seem that the ship, in which Lindenau was, stood away to the east coast of Greenland; or rather, it may be suspected, to the south, somewhere about Cape Farewell, where he was visited by a number of the "savages," as they are called, though very far from deserving that appellation. Wine, it is said, was offered to them, and not being to their taste was refused; but they drank with great avidity whole mugs of whale oil. The Admiral most unwarrantably seized two of the natives, and carried them off to Denmark; and it is said that those brought by Hall differed very much from those brought by Lindenau, in manners, language and appearance, the former being much superior in every respect.*

* Relation du Groenland par M. de la Peyrère. 1657.

JAMES HALL—*Second and Third Voyages.* 1606 & 1607.

The Danish government, resolving to follow up the further discovery of Greenland, caused four ships and a pinnace to be fitted out the next year for this purpose, and James Hall was appointed pilot-major of the fleet. Two of the ships, the *Frost* and the *Lion*, were the same as those employed the preceding year, and commanded by the same officers; the third was the *Eagle*, of one hundred tons; the fourth the *Gilliflower*, of forty tons; and the pinnace of twelve tons was called the *Cat*. The same admiral, Lindenau, was appointed to command this second expedition, and the three natives carried off by Cunningham were put on board to serve as interpreters and guides.

On the 29th May, 1606, the fleet sailed from Elsineur, and before they reached the northern shore of Labrador, about Cape Chidley, as it would appear, though no name is mentioned, two of the captive Greenlanders died. From hence they stood north-westerly towards the coast of Greenland, and about 63° 45′ found themselves encompassed with "mightie bankes of ice," which with great difficulty they got clear of. Having reached the latitude 64°, they saw land, which they supposed to be part of the coast of America, but which was probably the land to the northward of Frobisher's strait, the ships having been set over by a strong

westerly current. On the 25th they had sight of Greenland, about ten leagues to the south of Queen Anne's Cape, the Frost having on the preceding day been separated from the Lion and the Gilliflower. They put into Cunningham's Fiord, where, it seems, they had found a silver mine the year before, of which ore they had sworn to his Majesty to bring home a sufficient quantity; accordingly "they all landed to see the silver myne, where," says Hall, "it was decreed that we should take in as much thereof as we could." This, in fact, appears to have been the grand object of the extensive equipment furnished by the King of Denmark: it was the discovery of gold and silver, and not of the lost colonies, that actuated the framers of an expedition on a scale unnecessarily large for the purposes of scientific discovery; for in fact no search nor even mention is made either of a north-west passage or of the old colonies of Greenland. They rowed in their boats up the sound, passing "many green and pleasant islands," and after some days came to the mouth of a river which they named after the pilot of the Eagle, *Fos* river; the latitude of which is 66° 25′. On the bank of this river was situated the winter village of the natives, consisting of about forty houses "builded with whales' bones, the balkes being of whales' ribbes; the tops were covered with earth, and they had certaine vaults or sellers under the earth foure square, about two yards deepe in the ground." In the

burying place they observed the bodies wrapt in seal skins, "and stones laid in manner of a coffin over them." Here they seized five natives, to carry with them to Denmark, in lieu of whom they put on shore an unfortunate Dane to be left behind for having committed some crime which is not specified. They learned from their new captives that the country was named *Secanunga*, and that the great King, who lived in the interior, was carried upon men's shoulders.

It was now the 10th August, the weather began to be very stormy, and, finding themselves exceedingly hampered among the numerous islands and rocks and floating ice, they resolved to return to the southward, and after a long passage arrived in Copenhagen roads on the 4th October.

This fruitless expedition, it seems, was followed up by another the next year, equally fruitless. It consisted of two ships, the command of which was entrusted to a Danish captain of the name of *Karsten Richardisen*, a native of Holstein, who engaged some sailors from Norway and Iceland, as best acquainted with navigation among ice; but they proceeded no farther than Cape Farewell, as the Danish chronicle says, from mountains of ice obstructing their passage; but Hall gives a more probable reason. "I have also," says Purchas, "Master Hall's voyage of the next yeere 1607, to Greenland from Denmarke, written, and with representations of land-sights, curiously delineated

by Josias Hubert of Hull, but the Danes (envious perhaps that the glory of the discovery would be attributed to the English pilot) after the land saluted, mutinied, and in fine forced the ship to returne to Island. For which cause I have here omitted the whole."*

Peyrere gives from the Danish chronicle a long account of the treatment and behaviour of the Greenlanders in Denmark; of the feats they performed on the water with their canoes; of their manner of feeding on raw flesh and fish; and their fixed melancholy and pining away till they finally died of grief.†

JOHN KNIGHT. 1606.

While the King of Denmark was setting forth his second grand expedition for exploring "the myne of silver," and in the hope of filling his coffers with that precious metal, "the worshipfull Companies of Muscovey and the East India Merchants" were fitting out a small bark of forty tons, called the *Hopewell*, for the discovery of the north-west passage, under the direction of the same JOHN KNIGHT who had been master of the pinnace in the first Danish expedition. He left Gravesend

* Purchas, vol. iii. p. 827.

† Relation du Groenland par Peyrère, p. 180.

on the 18th April 1606, and after a long and tedious passage, destitute of any incident worth noticing, on the 18th June descried the land of America, rising like eight islands, in latitude 56° 48′ (about Cape Grimington, on the coast of Labrador.) Here a northerly gale came on, which brought down such vast quantities of ice, that the little bark, being surrounded with it, lost her rudder, and Knight found it expedient to haul her close into the bottom of the cove, in order to save the clothes and other articles belonging to the crew, the ship's stores and the provisions. Knight then, with the mate and four others, went on shore well armed, to endeavour to find out some more convenient place for repairing the damage which their ship had sustained. On landing, Knight, the mate, and his brother, with one of the crew, went up towards the highest part of the island, leaving two of the people to take care of the boat; these men waited in vain for their return from ten in the morning till eleven at night. The next day, a party well armed went in search of their unfortunate captain and his companions, but they were unable to reach the island on account of the ice. From this time no tidings were heard of the little party, and it was then concluded that they had been intercepted and slain by the savage natives, as these people came down afterwards and attacked the remainder of the crew with great ferocity, shooting their arrows and pursuing them

in all directions. They had very large boats, full of men, and the narrator thus describes their appearance:—"As farre as we could judge, they be very little people, tawnie coloured, thin or no beards, and flat nosed, and man eaters."

They now set about repairing their vessel, and after great exertion partially stopped the leak and succeeded in hanging the rudder; but on getting to sea, out of the ice, they found it necessary to keep the pump constantly going. They steered, with a rapid current in their favour, for Newfoundland, and after much suffering and fatigue reached Fogo on the 23d of July. They remained here, refitting and refreshing for about a month, after which they set sail on the 22d of August, and on the 24th of September landed at Dartmouth.*

HENRY HUDSON—*First Voyage.* 1607.

The unfortunate issue of Captain Knight's voyage does not appear to have in the least discouraged the merchants of London from persevering in the attempt to discover a nearer passage to Japan and China; but as hitherto neither the north-east nor the north-west had held out much hope of success, it was now resolved to try a new route, and to see what could be done by holding a course towards the north pole. For this enterprize they

* Purchas his Pilgrimes, vol. iii. p. 827.

selected HENRY HUDSON, an experienced and intrepid seaman, well skilled in the theory as well as practice of navigation, and in the use of nautical instruments. It deserves to be remarked that he is the first of the northern navigators, and probably the first Englishman, who made observations on the inclination or dip of the magnetic needle. This adventurous navigator, with ten men and a boy, in a small bark, whose name and tonnage have not been left on record, set sail from Gravesend on the 1st of May, 1607. On the 13th of June Hudson fell in with land a-head and some ice; the weather became foggy, and the sails and shrowds were frozen. The land was high and the upper part covered with snow, but being several days without an observation, Hudson was doubtful whether it was an island or part of Greenland. He reckoned his latitude to be then about 70°, and gave to a headland about that parallel the name of *Young's Cape*, and to a high mount, like a round castle near it, that of the *Mount of God's Mercy*. This land was evidently that jutting part of the east coast of Greenland which lies to the northward of Iceland.

On the 22d he was, by observation, in lat. 72° 38′ N., and, on the weather clearing up, he found himself about twelve leagues from the land. "It was a mayne high land, nothing at all covered with snow; and the north part of that mayne high land was very high mountaynes, but we could see

no snow on them." "It may be objected against us as a fault," continues Hudson, "for hauling so westerly a course. The chiefe cause that moved us thereunto, was our desire to see that part of Groneland which (for ought that we knew) was to any Christian unknowne; and we thought it might as well have beene open sea as land, and by that means our passage should have beene the larger to the pole." This land lying in lat. 73° he named *Hold with Hope.*

Hudson observes that this headland, unlike that of Young's Cape, had little or no snow on it, and the air, on their approach to it, was very temperate to their feeling; the rain fell in great drops, like the thunder showers in England. From this part of the east coast of Greenland, so seldom approached, he continued to steer away to the north-east in the hope of falling in with the body of *Newland*, the name given by the Dutch to Spitzbergen; and accordingly, on the 27th, they made this land, then nearly covered with fog, the ice lying very thick along the shore for fifteen or sixteen leagues. They reckoned themselves to be in 78° and near to *Vogel Hoek*; and it is remarked, that in running along near to the shore they found no great cold, yet there was great store of ice to the westward, which obliged them to stand to the southward between the land and the ice.

On the 1st of July they were embayed in the ice, and, by observation, it appeared they were

then in 78° 42′, which made Hudson conclude they were opposite *the great Indraught*, into which he afterwards entered very far, finding no bottom, with one hundred fathoms.* The next day they observed in 78° 56′, and on the 3d in 78° 33′. On the 4th, the wind being at north, it was very cold, and the shrowds and sails were frozen; and on the 5th they returned to the mouth of the inlet. Having sailed about in different courses to get free from the ice, with which the little vessel was frequently beset, they had an observation on the 11th, which gave the lat. 79° 17′. Among the ice was much drift-wood. They saw plenty of seals, and some bears, one of which was killed, and many of the people made themselves sick with eating bear's flesh, unsalted.

It was Hudson's intention to cross over from hence and pass round the southern extremity of the land called *Newland*, or Spitzbergen;† but the wind being south, and coming into a *green sea*, which he states to be always freest of ice, whereas a *blue sea* is always most pestered with ice, he stood to the northward, and in 80° 23′ saw the land to the southward. They entered a deep bay,

* This was the deep fiord or firth within Charles Foreland.

† Among the numerous blunders of Forster is that of ascribing the honour of the discovery of Spitzbergen to belong to Hudson; forgetting that in his own volume he had observed that "Hudson saw Spitzbergen in 1607, *which had been discovered eleven years before by the Dutch*"!—*Voy. and Dis. in the North*, p. 421.

or sound, at the bottom of which the mate and boatswain went on shore, where they found a pair of morses' teeth, whale bones, deer's horns, and the foot-marks of other beasts; they also met with much drift-wood and streams of fresh water. "Here they found it hot on shoore, and drunke water to coole their thirst, which they also commended." Hudson made the northernmost part of the land then in sight to be in about 81° N. latitude; but on attempting to sail farther north he saw more land joining to the same, "trending north in our sight, by meanes of the cleernesse of the weather, stretching farre into 82 degrees; and by the bowing or shewing of the skie much farther." This must either be a mistake, or he stood over so far to the west as to have fallen in again with Greenland extending to this latitude, which would rather seem to be the case, as he some time afterwards mentions, from an "icy skie and neerenesse to Groneland, there is no passage that way; which, if there had beene, I meant to have made my returne by the north of Groneland to Davis his Streights, and so for England." It might, however, have been the *ice-blink* that deceived him, which was then not so easily, as it now is, distinguished from what is called the *land-blink*.

On the 31st of July, being in want of all manner of necessaries, the weather thick and foggy, and the season being too far advanced to make further discovery that year, Hudson bore up in his

little bark for his return home, and passing Bear on Cherry Island arrived safely in the Thames on the [illegible] of September.*

HENRY HUDSON—*Second Voyage.* 1608.

Being baffled by the ice in his attempt to pass to the northward of Spitzbergen, HUDSON was now directed to try his success in the discovery of a north-east passage to the East Indies. His crew, on this second voyage, was increased to fourteen men. On the 22d of April he dropped down the river, and on the 3d of June got sight of the North Cape; and it is deserving of remark, that, in the course of this passage, he made three observations with a dipping-needle, which he calls the *inclinatory*; the first in lat. 64° 52′ gave 81° of inclination; in lat. 67° it was 82°; and in lat. 69° 40′ the needle inclined 84°. Having stood to the north-east till he reached the lat. 74° 30′ the inclination of the needle was found to be 86°. In 75° 29′ Hudson first fell in with the ice and attempted to pass through it, but found it so thick and firm after proceeding four or five leagues, that it was thought prudent to return, which was effected with a few rubs of the ship against the ice. From the 9th to the 15th of June little progress was made on account of the ice and fog. On the

* Purchas, vol. iii. p. 574.

latter day, being then in lat. 75° 7′, "one of our company, (says Hudson,) looking over boord saw a mermaid, and calling up some of the company to see her one more came up, and by that time shee was come close to the ship's side, looking earnestly on the men: a little after a sea came and overturned her; from the navill upwards her backe and breasts were like a woman's, (as they say that saw her,) her body as big as one of us; her skin very white, and long haire hanging downe behind, of colour blacke; in her going downe they saw her tayle, which was like the tayle of a porposse, and speeckled like a macrell. Their names that saw her were Thomas Hilles and Robert Rayner."*

On the 19th of June, in lat. 75° 22′, Hudson made an observation with the dipping needle, which, if at all correct, or nearly so, would lead to a conclusion that one of the magnetic poles was then at no great distance from this parallel, somewhere between Cherry Island and Nova Zembla; but even now, with all the modern improvements which philosophical instruments have undergone, very little dependence can be placed on observations made at sea, on account of the ship's motion, for the inclination of the magnetic needle. On the 25th, it is stated, that "the hope of a passage was gone this way by meanes of our nearenesse to Nova Zembla and the abundance of ice." They landed on Nova Zembla in about lat. 72° 12′, and

* Purchas, vol. iii. p. 575.

found whalebone and deer's horns, and the party brought on board two dozen of fowl and some eggs. The [illegible] full of morses, whales and seals.

Finding little hope of a passage between Newland (Spitzbergen) and Nova Zembla, "my purpose," says Hudson, "was by the Waygats to passe by the mouth of the river Ob, and to double that way the North Cape of Tartaria, or to give reason wherefore it will not be." The quantity of morses, however, induced him to hope that they might defray the charge of the voyage; in the meantime a party was sent up a large river flowing from the north-eastward, to see if a passage could not be found that way into a more easterly sea; but having traced it to one fathom in depth they returned. "Generally," says Hudson, "all the land of Nova Zembla that yet wee have seene, is to a man's eye a pleasant land; much mayne high land with no snow on it, looking in some places greene, and deere* feeding thereon; and the hills are partly covered with snow and partly bare." He adds, "it is no marvell that there is so much ice in the sea toward the pole, so many sounds and rivers being in the lands of Nova Zembla and Newland to ingender it; besides the coasts of Pechora, Russia and Groenland, with Lappia, as by proofes I finde by my travell in these parts; by meanes of which ice I suppose there will be no navigable passage this way." He therefore stood

* Hudson is the only navigator that mentions *deer* on Nova Zembla; and he was probably mistaken.

to the westward, "being out of hope to find passage by the north-east," and on the 26th of August arrived at Gravesend.*

HENRY HUDSON—*Third Voyage.* 1609.

The Merchant-adventurers who had set forth the two preceding voyages appear now to have given up all hope of finding a passage either by the north pole or the north-east: but HUDSON was probably more sanguine in his expectations; for we again find him employed by the Dutch in another voyage of discovery. The account of this voyage is written by Robert Ivet of Limehouse, is very long, and very uninteresting, at least in so far as it relates to northern discovery. In fact, one scarcely can form any notion, from the perusal of it, what could originally have been its principal object. He first doubles the North Cape, as if proceeding in quest of a north-east passage; but presently, without any reason being assigned, we find him turning back to the westward, passing the Feroe islands, and proceeding to Newfoundland; from thence he directs his course down the coast of America, as far as Charlestown, then back again to Cape Cod; and, finally, discovered Hudson's river, which he enters, and on which the Dutch afterwards founded a settlement.

* Purchas, vol. iii. p. 581.

HENRY HUDSON.—*Fourth Voyage.* 1610.

Once more the public attention of the British nation is again turned to the north-westward.

Sir John Wolstenholm, Sir Dudley Digges, and some others, were so thoroughly persuaded of the existence of a north-west passage, that they fitted out a vessel at their own expense, and gave the command of her to HENRY HUDSON, whose character had long been established as an experienced and enterprizing seaman.

Of this voyage, which terminated so fatally to the brave commander, we have only a very meagre account, at least of that part of it which is said to have been written by Hudson himself; enough, however, to shew that he passed through the strait into the mediterranean sea, improperly enough called a bay, both of which bear his name. The ship appropriated for this service was the *Discovery*, of 55 tons, victualled only, as it would appear, for six months. She left the river on the 17th April, 1610, and on the 9th June arrived off the entrance of Frobisher's Strait; but, on account of the ice and contrary winds, was compelled to ply to the westward for nearly a month, when on the 6th July she reached some rocks and islands, which Hudson named the *Isles of God's mercies*. Still plying to the westward, Hudson observed more land, in latitude 61° 24′, to which he gave the name of *Hold with Hope*.

On the 25th more land was seen, and named *Magna Britannia*, the ship being then in about 62½°. On the 2d August they had sight of a fair headland, to which was given the name of *Salisbury's Foreland;* and sailing from thence west-south-west fourteen leagues, and then seven leagues farther, they found themselves in the mouth of a great strait, in which they had no bottom at one hundred fathoms. This strait is formed by the north-west point of Labrador, which was named by Hudson *Cape Wolstenholm,* and a cluster of islands to the north-westward of it, the nearest headland of which he named *Cape Digges.* From hence the land was found to trend to the southward, and a large sea opened out:—here Hudson's brief remarks end, and the account of the remaining part of this unfortunate voyage is given by one Abacuk Pricket, on whose narrative very little dependence ought, perhaps, to be placed; as to the discoveries made after Hudson's death it is perfectly useless. He scarcely gives a date, distance, or latitude, and his account of the mutinous proceedings of the crew must be received with caution, and, indeed, creates no little suspicion as to its veracity, from his connection with the mutineers, and his being permitted to remain with them in the ship.

Such as it is, however, it furnishes an awful example of the wretched condition to which mutiny and disobedience to lawful command on

board a ship at sea, never fail to bring the unhappy men who are guilty of this crime.

Pricket says, that Hudson, being beset with ice, and almost despairing whether he should ever get free from it, brought out his card and shewed the ship's company that he had entered the strait above a hundred leagues farther than any Englishman had been before, and therefore left it to their choice whether they were disposed to proceed; on which some were of one mind and some of another, some wishing themselves at home, and some not caring where they were if once out of the ice; but, he adds, "there were some who then spake words which were remembered a great while after."

The first appearance of the mutiny is stated to have been produced by Hudson displacing the mate and boatswain, "for words spoken when in the ice," and appointing others. Proceeding to the south they entered a bay on Michaelmas day, and gave it that name, and here it would seem the discontent was increased by the master insisting to weigh the anchor while the rest were desirous of remaining there. Having spent three months "in a labyrinth without end," they at length found a place on the 1st November, where they hauled the ship aground, and on the 10th were frozen in. About the middle of the month John Williams, the gunner, died; on which occasion Pricket ejaculates, "God pardon the master's uncharitable

dealing with this man!" And now we are let into Abacuk's story of the conspiracy.

Henry Hudson had taken into his house in London a young man of the name of Greene, of good and respectable parents, but an abandoned profligate, whom he carried with him to sea "because he could write well," though in all probability from the more humane motive of saving him from ruin. This person quarrelled with the surgeon and others of the crew. Pricket speaks favourably of his "manhood;" "but for religion, he would say, he was cleane paper, whereon he might write what hee would." Having thus got rid of every religious feeling, it follows, of course, that no moral tie could bind him, and he soon began to conspire against his benefactor. The provisions growing short increased the discontent of the crew; but for the first three months this part of the country abounded with such covies of milk-white partridges, that they killed above a hundred dozen, besides others of different sorts; and when the partridges left them in the spring, their place was supplied with swans, geese, ducks, and teals, but all of them difficult to procure; so difficult, he tells us, that they were reduced to eat the moss and frogs; but the ice breaking up, seven men were sent out in the boat, and returned the first day with five hundred fish as big as good herrings, and some trouts; this supply, however, soon failed them.

Hudson now began to make preparations for leaving the bay in which they had wintered; previous to which he delivered out all the bread, being a pound to each man for about a fortnight, "and he wept when he gave it unto them." They had five cheeses, which were also divided among them, and which afforded three pounds and a half for seven days. They then stood to the north-west, and on the 18th June fell in with ice, and on the 21st, being still in the ice, Wilson the boat-swain and Greene came to Pricket, who was lying lame in his cabin, and told him that they and the rest of their associates meant to turn the master and all the sick into the boat, and leave them to shift for themselves; that there was not fourteen days' victuals left for the whole crew; that they had not eaten any thing the last three days, and were therefore resolved "either to mend or end; and what they had begun they would go through with it or die." Pricket of course says he dissuaded them from their horrid design, but that Greene bad him to hold his tongue, for he knew the worst, and he would rather be hanged at home than starved abroad. Presently came five or six others to Pricket's cabin, where the following oath was administered to each of the conspirators: "You shall swear truth to God, your prince, and country; you shall do nothing but to the glory of God and the good of the action in hand, and harm to no man:" and so it very soon appeared; for, on

Hudson's coming out of his cabin, they seized and bound his arms behind him; and on his asking them what they meant, they told him he should know when he was in the boat.

"The boat was accordingly hauled along side, "and the poore sicke and lame men were called upon to get them out of their cabbins into the shallop." Immediately the Captain, his son, and seven others were driven into the boat; and a fowling piece, some powder and shot, a few pikes, an iron pot, a little meal, and some other articles, thrown in at the same time. The mutineers then cut the tow rope and let her go adrift among the ice, where she was left with these unfortunate men, in a situation which cannot be contemplated without horror, and a feeling of deep indignation at the brutal perpetrators of this most atrocious act; and most of all, at the base ingratitude of the wretch who had been fed, clothed, and rescued from ruin by Hudson.

As soon as the boat was out of sight, Pricket says Greene came to him and told him that it was the will of the ship's company that he (Pricket) "should go up into the master's cabin, and take charge of it, which, after some reluctance, he tells us he did. The first dispute among the people was, which way they should steer, one being for standing to the north-west, and another to the north-east; however they were soon beset in the ice, where they remained shut up for fourteen days; and when at length they escaped from the ice,

their provisions were all gone, but they reached some islands on which they gathered cockle-grass to eat. They now began to talk among themselves that England would be no safe place for them, "and Henry Greene swore the shippe should not come into any place, but keep the sea still, till he had the king's majestie's hand and seale to shew for his safety;" and this Greene at length became their captain.

On the 27th July they reached some island near Cape Digges, at the western extremity of Hudson's Strait, where they got some gulls to feed upon, and some cockle-grass; and here they met with a great number of savages, with whom at first they were on friendly terms, but a quarrel soon ensued, in which Greene was killed, and three died of the wounds they had received in the scuffle. Pricket, after fighting manfully, by his own account, was also severely wounded—"and thus," he says, "you have heard the tragicall end of Henry Greene and his mates, whom they called Captaine; these four being the only lustie men in all the ship:" the survivors, says Purchas, were now in the most dreadful plight; provisions nearly gone, and themselves cut off from the only spot on which they had calculated on procuring a supply of sea fowl. They contrived, however, to procure about three hundred of these fowls. They now stood to the westward, and endeavoured to shape their course for Ireland. They had a

little meal left, and with this and half a sea fowl a day to each man, they made a kind of pottage. "We had flayed our fowle, for they will not pull; and Robert Ivet was the first to make use of the skins by burning off the feathers; so they became a great dish of meate, and as for the garbidge, it was not throwne away" .... "at length was all our meate spent, and our fowle restie and dry; but being no remedy, we were content with the salt broth for dinner, and the halfe fowle for supper." Nor was this the worst; they were compelled at last to eat their candles, and to fry the skins and crushed bones of the fowl in candle-grease, which, with a little vinegar, is stated to have made "a good dish of meate." Just before they reached the land, and the last of their fowls was in the steep-tub, Robert Ivet, whom Hudson is said to have displaced as mate, and next to Greene the chief mutineer, died for sheer want. They were now in the bay of Galloway, where they met with a Fowey fishing-smack, the people of which agreed, for a certain sum, to carry them into Plymouth.*

Such is the substance of Abacuk Pricket's narrative; and meagre and suspicious as it is, the most remarkable circumstance is that it appeared satisfactory in England; at least no further inquiry seems to have been made into the most in-

* Purchas his Pilgrimes, vol. iii. p. 596.

human and atrocious act that had been committed. Pricket, it is true, had disposed of the principal mutineers, and no doubt himself and those few who returned home made it out that they were compelled to enter into the conspiracy, or at least to remain neutral. It is to be remarked that the part of Hudson's Journal which they brought home terminates on the 3d August, 1810, when between the Capes Wolstenholme and Digges, but Hudson was not seized and thrust into the boat till the 21st June, 1811. Is it not then very surprizing that no inquiry should have been made for the master's journal during this long period? Pricket was the very person to have been made accountable, for he admits that he took charge of the master's cabin, and that Greene gave him the key of the master's chest. A shrewd navigator, commenting on the transactions of this voyage, says, "Well, Pricket, I am in great doubt of thy fidelity to Master Hudson."*

SIR THOMAS BUTTON. 1612.

The moral character of Abacuk Pricket, and of Robert Bylot, would not seem to have suffered very greatly in the eyes of the Merchant-Adventurers,

* North-west Fox, p. 117.

on account of the unhappy catastrophe which befel Hudson; and it may therefore be presumed that they substantiated by proof their innocence of all participation in that atrocious transaction. We find, at least, that both were engaged to proceed on the same voyage the following year, under the command of CAPTAIN (afterwards SIR THOMAS) BUTTON, a gentleman then in the service of Prince Henry, an able seaman, and a man of very considerable talent. The two ships fitted out for this new voyage of discovery bore the same names as those under the celebrated Cook, when employed on the same service, but on the opposite side of America—the *Resolution* and the *Discovery;* the former of which was commanded by Sir Thomas, the latter by Captain Ingram. Sir Thomas Button had with him besides, on this voyage of discovery, a relation of the name of Gibbons, and one Captain Hawkridge, both volunteers, and men of reputed skill and experience. The two ships, being in all respects ready for sea and victualled for eighteen months, took their departure early in May 1612.

For reasons that one cannot well comprehend, the voyage of Sir Thomas Button was never published, either by himself or by any competent authority; a sort of mysterious secrecy being kept up, though several details, collected from different persons employed on it, and from verbal information, as well as some abstracts said to be taken from Button's own journal by Sir Thomas Roe,

were some years afterwards printed by Fox, in the introductory part of his own voyage.*

The opening of Hudson's Strait into a great western sea, and the report in Abacuk Pricket's journal of Hudson's ship having been floated off a rock near Cape Digges, by a *high tide* flowing from the *westward*, are the reasons assigned for undertaking this new voyage of discovery. It is to be hoped however, that humanity had some share in the business, and that one of the objects of the expedition might be that of inquiring after the fate of the unfortunate Hudson and his companions. The intention at any rate was to follow the track of Hudson; and accordingly, on arriving off the strait, Button stood directly to the westward, for Digges's Island, where he remained about a week employed in fitting up a pinnace which had been brought out in pieces from England. He then continued to proceed to the westward, till he made the southern part of the large island, which in some charts is called Southampton Island, and to which he gave the name of *Carey's Swan's Nest;* and from hence still sailing westerly he fell in with more land on the main coast of America, in lat. 60° 40′, to which he gave the name of *Hopes Checked.* A storm coming on, the two ships stood to the southward down Hudson's Bay, and on the 15th August, entered the mouth of a river in lat. 57° 10′,

* North-west Fox, p. 117.

which was named by Button, *Nelson's River*, so called from the master of his ship, whom he had the misfortune to lose, and who was interred at this place.

The season being far advanced, and Button seeing it would be expedient to winter here rather than in a more northerly latitude, his first care was to secure the two ships against the wind and tides and the floating ice, which he learned from early experience might be expected to be still more troublesome in the course of the winter. Many of the people died from the severe cold, though the river was not frozen over till the 16th February. The weather however was frequently mild, and Button took advantage of it by employing his people on shore in killing game. The quantity of partridges was so abundant and so easily procured, that they are said to have taken and consumed no less than eighteen hundred dozen. He also contrived, like a wise commander, to keep the crew employed during their confinement to the ship, well knowing that the best way of preventing men from murmuring, discontent, and secret conspiracies, was to divert their minds from dwelling on their own unpleasant situation. To the inferior officers he put questions concerning the route of their late navigation, and engaged them in comparing each other's observations as to the courses they had run, the set of the tides, the latitudes of the places they had touched at; and apparently

consulting them what they should do, and what course pursue, on the approach of spring. Every man in the ship by these means felt himself of some importance, and took an interest in the further prosecution of the voyage. Among others we find an answer given by one Josias Hubert, the pilot of the *Resolution*, to the question, How the discovery might be best prosecuted when they should be able to go to sea? which shews the sound notions entertained by this man respecting the true mode of searching for the passage, "My answer," he says, "to this demand is, to search to the northward about this western land until, if it be possible, that we may find the flood coming from the westward, and to bend our courses against that flood, following the ebb, searching that way for the passage. For this flood which we have had from the eastward, I cannot be persuaded, but that they are the veins of some head-land to the northward of the Checks, and by the inlets of rivers which let the flood-tides into them, which headlands being found, I do assure myself, that the tide will be found to come from the westward."

The ice broke up from Nelson's River on the 21st of April, but they did not quit their winter anchorage till two months afterwards, when they stood to the northward exploring the eastern coast of America, conformably with Hubert's idea, as high along the land of Southampton Island as 65°. Proceeding again to the southward Button fell in

with some islands which he named *Mancel's Islands*, and which are now marked on the charts as *Mansfield's Islands*. To the extreme point of Southampton Island, lying to the westward of Carey's Swan's Nest, he gave the name of *Cape Southampton*, and to that on the east of it *Cape Pembroke*. After this he passed Cape Chidley, and in sixteen days reached England in the autumn of 1613.

There seems to have been no reason why the proceedings of the voyage of Sir Thomas Button should have been kept secret, or published only piecemeal. He was the first who reached the eastern coast of America on the western side of Hudson's Bay, and discovered Nelson's River, which has long been the principal settlement of the Hudson's Bay Company. He was strongly possessed with the idea of the existence of a north-west passage; and he told Mr. Briggs, the celebrated mathematician, that he had convinced King James of the truth of this opinion, which is said to have had so much influence with the Adventurers as to induce them to make a further attempt the following year.

JAMES HALL—*Fourth Voyage.* 1612.

In the same year that Sir Thomas Button sailed from England, JAMES HALL also made a fourth voyage, with two small vessels, called the *Patience* and *Heart's Ease*, fitted out by a new set of

merchant-adventurers of London, of whom Mr. Alderman Cockin appears to have been one of the principal partners; but it proved fatal to the persevering commander of this expedition, who was mortally wounded by the dart of an Esquimaux on the coast of Greenland. The little that is known of this voyage appears to have been written by William Baffin; and it is chiefly remarkable for its being the first on record, in which a method is laid down, as then practised by him, for determining the longitude at sea by an observation of the heavenly bodies; and the method he made use of sufficiently proves that Baffin possessed a very considerable degree of knowledge in the theory as well as practice of navigation. On an island in Cockin's Sound he first determined, by various observations of the sun, both above and below the pole, an exact meridian line; he says, "on the 9th of July I went on shoare the island, being a faire morning, and observed till the moone came just upon the meridian. At which very instant I observed the sunnes height, and found it 8 degrees 53 minutes north, in the elevation of the pole 65 degrees 20 minutes. By the which, working by the doctrine of sphericall triangles, having the three sides given, to wit, the complement of the pole's elevation; the complement of the Almecanter; and the complement of the sunnes declination; to find out the quantity of the angle at the pole: I say, by this working, I found it to be

foure of the clocke, 17 minutes and 24 seconds. Which, when I had done, I found by mine ephemerides, that the moone came to the meridian at London that morning at foure of the clocke, 25 minutes, 34 seconds, which 17 minutes, 24 seconds, subtracted from 25° 34′ leaveth 8° 10′ of time, for the difference of longitude betwixt the meridian of London and the meridian passing by this place in Groenland. Now the moone's motion that day was 12 degrees 7 minutes, which converted into minutes of time, were 48 minutes 29 seconds; which, working by the rule of proportion, the worke is thus: if 48 minutes 29 seconds (the time that the moone commeth to the meridian sooner that day, then she did the day before) give 360 (the whole circumference of the earth), what shall 8 minutes 10 seconds give—to wit, 60 degrees 30 minutes, or neere thereabout; which is the difference of longitude betweene the meridian of London and this place in Groenland, called Cockin's Sound, lying to the westward of London."*

Baffin admits that the operation is somewhat difficult and troublesome, and liable to error; yet the importance of knowing the longitude of places renders it, in his opinion, highly expedient that mariners should practise such things; and, he

* Purchas, vol. iii. p. 832.

adds, "I know some of the better sort which are able to work this and the like propositions exactly."

From Cockin's Sound they proceeded towards the river, "where the supposed myne should be" —from which expression it may be conjectured that the object of the present voyage was the discovery of gold and not of the north-west passage. The weather being stormy, with the wind from the northward, they put into Ramelsford on the 21st of July; and here about forty of the savages came down to barter with them. "At which time our master, James Hall, being in the boate, a savage, with his dart, strooke him a deadly wound upon the right side, which our surgeon did thinke did peerce his liver. We all mused that he should strike him, and offer no harme to any of the rest: unlesse it were, that they knew since he was there with the Danes; for out of that river they carried away five of the people, whereof never any returned againe; and in the next river they killed a great number." "All that day he lay very sore pained, looking for death every houre; and on Thursday the three and twentieth, about eight of the clocke in the morning he dyed, being very penitent for all his former offences."*

Having buried the master they proceeded to the northward and entered Cunningham's river, where

* Purchas, vol. iii. p. 832.

they "found divers places where the Danes had digged; it was a kinde of shining stone, which, when our goldsmith, James Carlile, had tried, it was found of no value, and had no mettall at all in it; but was like unto Muscovie studde, and of a glittering colour." From hence they proceeded to Ramelsford, which lies in lat. 67°. Here the new master, Andrew Barker, and the merchant, Mr. Wilkinson, and others, held a conference about returning home; because, since the murder of Hall, none of the savages would come near to trade with them as usual. Accordingly, on the 10th of August, they stood out of the harbour, and on the 17th of September they arrived at Hull.

CAPTAIN GIBBONS. 1614.

The reason assigned for Sir Thomas Button not following up the attempt to discover the passage, of the existence of which he was so sanguine, is the death of his patron, Prince Henry, during his absence on the first voyage. But the same ship, the *Discovery*, which had accompanied the Resolution, was again fitted out and victualled for twelve months, and the command of her given to CAPTAIN GIBBONS, the relation and friend of Sir Thomas Button, who had been with him the preceding year. The high character given by Sir Thomas to this officer as a seaman, of whom he

does not hesitate to say "that he is not short of any man that ever yet he carried to sea," had raised great expectations from this voyage, which, however, were wofully disappointed. Captain Gibbons had not proceeded far into Hudson's Strait before he fell in with the ice, which came down in such quantities as to hamper him very considerably. The weather also was boisterous, cold and foggy, which induced him to turn back. Some, indeed, are of opinion that he never reached the Strait, but was driven by the southern current and the floating ice down the coast of Labrador, where he took shelter in a bay lying in about 57°, in which he remained nearly five months, completely blocked up by the ice. To this spot his ship's company are said to have given, in derision, the name of "*Gibbon's his hole.*" Escaping at length, with considerable damage to his ship, he made the best of his way home. The bay in which he was thus caught appears to be that now called Nain, at the head of which there is an establishment of Moravian missionaries.

ROBERT BYLOT. 1615.

The total failure of Captain Gibbons, notwithstanding the high character given of him as a seaman by Sir Thomas Button, did not discourage the adventurous merchants from following up the pro-

secution of discoveries in the north-west. They again fitted out the *Discovery* for a fourth voyage towards this quarter. ROBERT BYLETH or BYLOT, who had been employed on the three former voyages, under Hudson, Button and Gibbons, was now appointed master; and William Baffin, by whom the account of the voyage is written, his mate and associate. The crew consisted of fourteen men and two boys. With these slender means they left the Thames on the 16th of April, and saw Greenland on the east side of Cape Farewell on the 6th of May, from which time to the 17th, in proceeding westerly, they were much hampered with ice, and, on that day in particular, passed many great islands of ice, some of which are stated to be more than two hundred feet high above the water. "This," says Baffin, "I proved by one shortly after, which I found to be two hundred and forty foot high, and if report of some men be true, which affirms that there is but one seventh part of the ice above water, then the height of that piece of ice, which I observed, was one hundred and forty fathoms (280 fathoms) or one thousand sixe hundred and eightie foote from the top to the bottome."* On the 27th they

* Purchas, vol. iii. p. 837.

Forster, in quoting from Fox, makes a most ridiculous mistake, and after a learned dissertation on the specific gravity of ice, concludes that the mass in question must have been 8,400 feet high; "which," he adds, as well he might, "is, indeed, a most tremendous height."—*Voyages, &c. in the North*, p. 361.

saw the island of *Resolution*. On the 31st they came in sight of *Button's Isles*, and the next day stood across and got into a good harbour on the north-west side of the island of Resolution, whose longitude was ascertained, by observation, to be 66° 35′ W. from London, and the variation of the compass 24° 6′ W. Standing to the northward they came to a cluster of islands in Lumley's inlet, to which they gave the name of *Savage Islands;* why, is not very clear, because though they observed on some of them many tents and canoes, and dogs, they saw no people. On ascending a hill, however, they discovered a large boat on the water with fourteen people in it. "Among the tents I found," says Baffin, "a little bagge, in which was a company of little images of men; one the image of a woman with a child at her backe, all the which I brought away." The dogs, to the amount of thirty-five or forty, were most of them muzzled, and are described as a sort of "mungrele mastiffes, being of a brinded blacke colour looking almost like wolves." These dogs draw their sleds over the ice, and they draw with collars and other furniture.

In the narrow passages between these islands the ship was frequently set fast in the ice, which sometimes entirely choked up those straits. Here Baffin observes, that he saw the sun and the moon at the same time, which is not unusual in fair weather; and this gave him an opportunity of

making an observation for the longitude; justly remarking, that "if observations of this kinde or some other, at places farre remote, as at the Cape Bona Speranza, Bantam, Japan, Nova Albion and Magellan Straits, I suppose we should have a truer geography then we have."

The ice at length opening afforded an opportunity for the ship to escape; they next approached Salisbury Island, a little to the northward of which was a cluster or group, to which they gave the name of *Mill Islands*, from the grinding of one mass of ice against the other. The latitude of the main island of this group was observed to lie in 64°. In the narrow sounds made by these islands, the ice running one way and the current the other, the ship was frequently in the utmost danger; "but God," says Baffin, "which is still stronger then either ice or streame, preserved us and our shippe from any harme at all." They continued advancing slowly to the north-westward; and finding the flood coming down from the northward, they were "put in great comfort and hope of a passage in this place," on which account the master called the cape or headland *Cape Comfort*; and the hope was increased by finding the depth of one hundred and forty fathoms not a league from the shore. The lat. of this cape is 65° and long. 85° 20′ W. of London. "But this our sudaine comfort," says Baffin, "was as soone quailed;" for having passed

the cape the land was observed to stretch away to the north-eastward, and the farther they proceeded north the shoaler was the water, and the more the sea pestered with ice. Having, therefore, reached the lat. 65° 26′ and long. 86° 10′ W., the master concluded they were in a great bay, "and so tacked and turned the shippes head homewards, without any farther search."

Coasting the land, therefore, to the southward, they fell in with a number of morses, and called the point opposite, *Sea-horse Point;* passed Nottingham's Isle, near which they remained till the 27th of July, observing the set of the tides, the time of high water, &c. and taking in ballast. From thence they proceeded between Salisbury and Nottingham Islands. The master, however, was not quite satisfied in giving up the point so soon and stood back again to Sea-horse Point, but the trending of the land gave no hopes of a passage that way, and they again stood to the south-eastward to Digges's Islands, where they killed about seventy fowls, which are called willocks; and it is observed they might have killed many thousands, these birds frequenting those islands in incredible multitudes. On the 5th of August they passed Resolution Island, and on the 7th of September came to anchor in Plymouth Sound; all the crew living, having only three or four sick, all of whom speedily recovered.

ROBERT BYLOT AND WILLIAM BAFFIN. 1616.

This is the fifth voyage made in the little bark the *Discovery* in search of a north-west passage, which ship was again fitted out by the same adventurers, who, we are now told, were the Right Worshipful Sir Thomas Smith, Knight, Sir Dudley Digges, Knight, Master John Wolstenholme, Esquire, Master Alderman Jones, with some others. Robert Bylot was again appointed Master, and William Baffin Pilot. The instructions given for their guidance have the merit of being clear, distinct, and brief.

" For your course you must make all possible haste to the *Cape Desolation;* and from thence you, William Baffin as pilot, keep along the coast of Greenland and up *Fretum Davis*, until you come toward the height of eighty degrees, if the land will give you leave. Then, for feare of in-baying, by keeping too northerly a course, shape your course west and southerly, so farre as you shall thinke it convenient, till you come to the latitude of sixtie degrees; then direct your course to fall with the land of *Yedzo*, about that height, leaving your farther sayling southward to your owne discretion, according as the time of the year and windes will give you leave; although our desires be, if your voyage prove so prosperous, that you may have the year before you, that you goe so farre southerly as that you may touch the

north part of Japan, from whence, or from Yedzo, if you can so compasse it without danger, we would have you to bring home one of the men of the countrey; and so God blessing you with all expedition to make your return home againe."*

On the 26th March the Discovery, with seventeen persons on board, set sail from Gravesend; but the weather being boisterous, they were compelled to seek shelter, first in Dartmouth and then in Plymouth. They got away from the latter place on the 19th April, and, "after a good passage, the first land we saw was in *Fretum Davis*, on the coast of Greenland, in the latitude of 65° 20′." They proceeded northerly, without obstruction, to latitude 70° 20′, and anchored in a fair sound near the *London Coast* of Davis. The natives all ran away, leaving their dogs behind them. Here the small rise of the tide being only eight or nine feet, gave Baffin "some dislike of the passage."

On the 30th May they reached *Hope Sanderson*, the extreme point of Davis's progress, lying between 72° and 73°, and fell in with much ice, which on the 1st June they got clear of, and, the wind being contrary, put in among a cluster of islands; but on the natives seeing their ship they fled away, leaving their tents behind. They found several women, however, who had hidden themselves among the rocks, some of them young and others old, one of the latter being from her ap-

* Purchas's Pilgrims, vol. iii. p. 842.

pearance little less than fourscore. To this group they gave the name of *Women's Islands;* the latitude of that nearest which they lay being 72° 45′, the tide still small, and the flood coming from the southward. The inhabitants are described as very poor, living on seal's flesh, which they eat raw, and clothing themselves with their skins. The faces of the women were marked with black streaks. They seemed to worship the sun, pointing constantly to it and stroking their breasts, and calling out at the same time *Ilyout!* The men and dogs are buried in the same manner, each having a heap of stones piled over them.

Departing from hence they stood away to the northward, between the ice and the land, being in a channel as it were of seven or eight leagues wide, till they came to the latitude 74° 4′, when they found themselves much pestered with the ice; and here they dropped anchor near three small islands, which appeared to be occasionally visited by the people of the neighbouring coast. They then tried to make their way to the westward, but the ice was too firm to let them pass; and therefore they returned to some islands in latitude 73° 45′ to wait till the ice (which they observed to consume very fast) should disappear. During their stay at this place, some forty of the natives came in their boats and exchanged seal's skins, sea morse teeth, and unicorn's horns, for small pieces of iron, glass beads, and such like. To this place they gave the name of *Horn Sound.*

On the 18th, on perceiving that much of the ice had already wasted, they proceeded northerly; but the weather was extremely cold with much snow, and Baffin says, it froze so hard, "that on Midsummer day our shrowds, roapes, and sailes were so frozen that we could scarce handle them." By the 1st July, being then in latitude 75° 40′, they had got into an open sea, "which," says Baffin, "anew revived the hope of a passage." On the second they found a fair cape or headland, which they named *Sir Dudley Digges's Cape*, in latitude 76° 35′, and twelve leagues beyond this a fair sound, having an island in the midst, making two entrances. To this sound they gave the name of *Wolstenholme Sound;* it is described as having many inlets or smaller sounds in it, and as a fit place for the killing of whales.

On the 4th, the weather being stormy, they found themselves embayed in a large sound, in which they saw so many whales that they named it *Whale Sound:* it lies in latitude 77° 30′. Between two great sounds was an island, which they called Hakluyt's Island, and the latter sound *Sir Thomas Smith's Sound*, which runneth to the north of 78°, "and is admirable in one respect, because in it is the greatest variation in the compasse of any part of the world known; for, by divers good observations, I found it to be above five points or fifty-six degrees varied to the westward." To a cluster of islands Baffin gave the name of *Carey's Islands*,

but he does not give their position, observing, that "all which sounds and islands the map doth truly describe." Of this map of Baffin hereafter.

The wind being favourable they stood to the south-westward, in an open sea, and with a stiff gale of wind, till the 10th, when it became calm and foggy; they were then near the land, in the entrance of a fair sound, which they named *Alderman Jones's Sound.* The boat was sent on shore, but it soon returned on account of the bad weather; no sign of people were seen, but abundance of sea morses among the ice. Standing on to the westward, they opened out, on the 12th, another great sound in 74° 20′, which they named *Sir James Lancaster's Sound.* "Here," says Baffin, "our hope of passage began to be lesse every day than other, for from this sound to the southward wee had a ledge of ice betweene the shoare and us, but cleare to the seaward; we kept close by this ledge of ice till the 14th day in the afternoone, by which time wee were in the latitude of 71° 16′, and plainely perceived the land to the southward of 70° 30′; then wee, having so much ice round about us, were forced to stand more eastward;" and in this direction they ran amongst the ice threescore leagues, nor could they approach the land till they came to about 68°, and being then unable to get to the shore on account of the ice, they drifted down to 65° 40′. "Then," says Baffin, "wee left off seeking to the west shoare, because wee were in the indraft of *Cumberland's*

Isles, and should know no certaintie and hope of passage could be none." He adds, "Now seeing that wee had made an end of our discovery, and the year being too farre spent to goe for the bottome of the bay to search for drest finnes,* therefore wee determined to goe for the coast of Groneland to see if we could get some refreshing for our men." Their crew, it seems, were very weak and sickly, one had died and three laid up in their hammocks. They therefore stood for the shore, and anchored in a place called *Cockin Sound*, in latitude 65° 45′. And here on a little island they found abundance of scurvy-grass, which they boiled in beer, and mixing it with sorrel and orpen, both very plentiful, made good sallads; the men in the course of eight or nine days perfectly recovered. They also received, after continuing a few days, "salmon peale" from the natives. It is also stated, that in this sound "were such great scales of salmon swimming to and fro, that it is much to be admired."

They left this bay on the 6th August, and on the 25th of the same month came in sight of the coast of Ireland, and on the 30th anchored safely in Dover Road, "for the which," says Baffin, "and all other his blessings, the Lord make us thankful."

This voyage, which ought to have been, and indeed may still be, considered as the most interest-

* Whalebone.

ing and important either before or since, is the most vague, indefinite, and unsatisfactory of all others, and the account of it most unlike the writing of William Baffin. In all his other journals, we have not only the latitude and longitude noted down, but the observations of the heavenly bodies from which they were deduced, and the arithmetical operation inserted; the longitude, the variation and declination of the magnetic needle, the courses steered, and a variety of particulars entered on the proper day; but in this most important voyage, purporting to have reached many degrees of latitude beyond any preceding voyage, and to have skirted the coast and islands of America, where the passage must have been found, if it has any existence, we have neither course, nor distance, nor variation of the compass, except once, and no one longitude whatever; so vague and indefinite indeed is every information left, which could be useful, that each succeeding geographer has drawn "Baffin's Bay" on his chart as best accorded with his fancy. It would almost seem as if Baffin was averse from discovery on this voyage; for when they had reached only the latitude 70° 20′, beyond which even Davis had been, he conceived "some dislike of the passage;" and the slovenly manner in which he runs over the numerous "sounds," in a very high degree of latitude, is quite vexatious; indeed, from the multitude of whales, which he describes to choke up those

sounds, they were perhaps nothing more than openings between huge ice-bergs, or at any rate passages made by an archipelago of islands. Baffin is so much aware of this, that in his letter to Mr. John Wolstenholme he observes, "some may object and aske why we sought that coast no better?" to which he alleges, in answer, the badness of the weather, the loss of anchors, the weakness of the crew, and the advanced season of the year.

Purchas, however, is blameable to a certain degree, for the meagreness of Baffin's journal and the suppression of a chart which accompanied it; for he admits, in a marginal note, that "this map of the author's for this and the former voyage, with the tables of his journall and sayling, were somewhat troublesome and too costly to insert."* It may be observed, that Baffin drew off from the main land of America to the eastward, from the very spot where of all others a passage is most likely to be found; but he is not to blame for not then possessing that knowledge which Cook and Hearne and Mackenzie have since supplied.

* Purchas's Pilgrims, vol. iii. p. 847.—"Purchas," says Dalrymple, "has unpardonably omitted publishing Baffin's original map, which, as well as his journal, he had in his possession. Nor can the low state of the art of engraving at that time be pleaded as an excuse, since that valuable original merited his attention more than the vile scraps he has given from Hondius." —*Mem. of a Map of the Lands around the North Pole.*

VARIOUS VOYAGES, OF A MIXED CHARACTER, TO HIGH NORTHERN LATITUDES.

From 1603 *to* 1615.

THE various voyages which had been made into the arctic seas, for the purpose of discovering a passage to the Indies, not only laid the foundation of an extensive and advantageous commerce with Russia, but gave rise to the regular establishment of the fisheries of Newfoundland, of Davis Strait and of Spitzbergen. So early as the year 1603, the "worshipful Francis Cherie" fitted out a ship, called the *Grace*, of fiftie tons, whereof STEPHEN BENNET was master, with instructions to visit Cola in the first place, in order to dispose of her cargo, and take in such other goods as Lapland might afford; and after that "to proceed upon some discoverie." For the latter purpose Bennet left the river of Cola on the 6th of August, with a determination to sail as far as 80° of latitude, if nothing should hinder him. On the 17th of August he fell in with an island, on which the people landed, but found nothing but two foxes, one white the other black, a piece of lead, and a fragment of a morse's tooth. Being too late in the year to attempt any thing farther to the north, he stood from this island to the westward, continuing in the same parallel till he had an observation, by

which he determined the latitude of the island to be 74° 30′. This island, though discovered by Barentz several years before, and named by him *Bear Island*, was now named by Bennet, and has since retained the name, *Cherry Island.*

The following year Bennet proceeded on the same voyage, in the *God Speed*, of sixty tons, belonging to Mr. Thomas Welden. They left Wardhuys the 6th of July. On the 8th they saw Cherry Island, and, on going on shore, found "so many fowles that they covered the rockes, and flew in such great flockes that they shewed like a cloud;" and, in returning, "a huge morse putting his head above the water, made such a horrible noyse and roaring, that they in the boate thought he would have sunk it." On another part of the island they found "a multitude of these monsters of the sea, lying like hogges upon heaps." They shot at them in vain till their muskets were spoiled and their powder was spent, when "wee would blow their eyes out with a little pease-shot, and then come on the blind side of them, and with our carpenter's axe cleave their heads: but for all that wee could doe, of above a thousand wee killed but fifteene." They filled a hogshead with the loose teeth found on the island. In the interior they saw only fowls and foxes. On another side of the island were at least a thousand morses lying, and on the shore abundance of drift-wood, mostly fir. Having killed about fifty of the morses or wal-

russes, they returned to Cola; and, departing for England, arrived in the Thames the 15th of October, 1604.

The next year Mr. Welden, the owner of the ship, with Bennet, as master, made another voyage to Cherry Island; and being now more expert in killing the morses, they not only took their teeth but boiled their blubber into oil. They also discovered a mine of lead-ore, and brought away about thirty pounds of it in weight.

Again, in 1606, Bennet proceeded in the same ship, accompanied by a pinnace of twenty tons. They arrived off the island on the 3d of July, but the ice not having yet broken up from the shores, the morses had not landed. On the 13th the ice began to go away and the morses to land. A party, properly equipped, went on shore; and so well had they improved in the work of destruction, that "before six hours were ended wee had slayne about seven or eight hundred beasts." By the 26th they had taken on board twenty-two tons of oil and three hogsheads of teeth, besides which they slew two large bears. They then left the island on the 29th of July, and on the 15th of August arrived in the Thames.

In 1608 Mr. Welden again proceeded in his ship to Lapland and Cherry Island, at the latter of which he arrived on the 18th of June, slew two bears on shore, and perceived great store of sea morses. On the 21st and 22d the weather is

stated to have been calm and clear, and as hot as is commonly felt at that time of the year in England; "for the pitch did runne downe the ship's sides; and that side of the masts that was to the sunne-ward was so hot that the tarre did frye out of it, as though it had boyled."

At the bottom of a cove, on the south side of the island, they slew about nine hundred or a thousand morses in less than seven hours; and such was the quantity of these animals killed, that by the 9th they had taken in thirty-one tons of oil, one hogshead, one barrell and one tierce of morses' teeth, besides 400 loose teeth. There was also a second ship here, called the Dragon belonging to a brewer of St. Catharine's.

They took on board a couple of young morses, male and female; the female died on the passage, but the male was brought home alive and carried to the court, "where the king and many honourable personages beheld it with admiration, for the strangenesse of the same, the like whereof had never before beene seene alive in England. Not long after it fell sick and died. As the beast in shape is very strange, so it is of strange docilitie, and apt to be taught, as by good experience wee often proved."*

Another voyage to this island was undertaken in 1609, which is chiefly remarkable on account

* Purchas, vol. iii. p. 560.

of formal possession being taken of it in the name of the Muscovy Company; of the extraordinary quantity of bears seen and slain; of the multitude of foxes; of good sea coal, and three mines of lead ore being discovered on Gull Island; and for their meeting with no less than three other ships at the island, making with theirs a little fleet of five vessels, and one hundred and eighty-two men; the whole of which vessels, being caught in a cove by the drift-ice, had nearly been crushed to atoms.

In consequence of the possession taken of Cherry Island, on the part of the Muscovy Company, the ship *Amitie*, of seventy tons, was fitted out by that company in the year 1610 for a further discovery to be made towards the North Pole, either for trade or a passage that way, of which ship JONAS POOLE, who had been on all the former voyages, was appointed master. He passed the North Cape on the 2d of May, "after many stormes, much cold, snow and extreame frosts." He made the latitude of Cherry Island on the 6th, but could not approach it on account of the vast quantity of ice, among which "the ship had many a knocke." He stood on to the northward, and, on the 16th of May, saw land in 76° 50′, which was, of course, a part of Spitzbergen. The boat was sent on shore, and the people finding a deer's horn they gave the name of *Horn Sound* to the bay in which they landed; and to the land first seen, about four leagues to the southward of the bay, that of

Muscovy Mount. Leaving this part of the coast he stood first to the westward, then to the northward, and in lat. 77° 25′ finds the weather on the 17th of May "very warme and farre temperater" than at the North Cape at the same period of the year. On the 19th, however, he says, "it was very thick fogges, with wind, frost and snow, and cold, that I thinke they did strive here which of them should have the superioritie." Such was the continuance of fog that he complains of not being able to see the sun on the meridian for five days, and not at all for sixty hours, though constantly above the horizon. In 78° 37′ he named the headland of a small island *Fair Foreland;* and here he assures himself "that a passage may be as soone attayned this way, by the pole, as any unknowne way whatsoever, by reason the sun doth give a great heat in this climate; and the ice that freezeth here is nothing so huge as I have seen in 73 degrees."

On a small island he killed a great number of deer, and gave to the bay the name of *Deer Sound;* after this they slew several bears, and a multitude of the walrus or sea-horse. "The tenth day," he goes on to say, "I went on shoore and slue five deeres, with the which and them that I slue before, I have lengthened out my victuals, blessed be the Creator of the world, which hath not made any part thereof in vaine, but so that in these parts (which hath seemed impossible to our

ancestors to bee travelled unto, by reason of the extreame cold which they supposed to be here) I find the ayre temperate in the lands, and nothing so cold as I have found at Cherry Island in five severall voyages. Moreover, in this land I have seene great store of deere, which have neither bark nor tree to shelter them from the nipping cold of winter, nor yet any extraordinarie pasture to refresh them. If then (I say) having nothing but the rockes for a house, and the starry canopie for a covering doe live here, why may not man, which hath all the gifts of God bestowed upon him for his health and succour?"*

The farthest latitude reached in this voyage was 79° 50′, in which parallel was situated a part of land, to which Poole gave the name of *Gurnerd's Nose*, leading into *Faire Haven*, where he also met with and killed several deer, which were in such excellent condition that both these and most of them which had before been killed had two and three inches thick of fat upon them. In *Deer Sound* they found sea-coal, which burned very well. Towards the end of July he stood to the southward with the intention of calling at Cherry Island, but the ice was so thickly packed that he gave up the attempt and proceeded homewards, arriving in London on the last day of August.

This voyage, as appears by the commission given

* Journal of Jonas Poole in Purchas, vol. iii. p. 703.

to Poole, was intended not only as an experiment to "catch a whale or two," and to kill sea morses, but also for northern discovery. It thus sets out: "Inasmuch as it hath pleased Almightie God, through the industry of yourselfe and others, to discover unto our nation a land lying in eightie degrees toward the North Pole: We are desirous, not only to discover farther to the northward, along the said land, to find whether the same be an island or a mayne, and which way the same doth trend, either to the eastward or to the westward of the pole; as also whether the same be inhabited by any people, or whether there be an open sea farther northward then hath been already discovered: For accomplishing of all which our desires we have made choice of you, and to that end have entertained you into our service for certaine yeares upon a stipend certayne; not doubting but you will so carrie yourselfe in the businesse for which you were so entertayned, as God may be glorified, our countrey benefited, yourselfe credited, and we in our desires satisfied, &c."

Jonas Poole appears to have been a faithful servant, and a good and well experienced mariner; but Purchas tells us that, after this voyage, as he had heard, "he was miserably and basely murthered betwixt Ratcliffe and London;"* notwithstanding which he continues to give two more

* Purchas, Pil. vol. iii. p. 707.

voyages, performed afterwards, and written by Jonas Poole himself.

The same company sent out the following year a large ship of 150 tons, of which STEPHEN BENNET was master, and Thomas Edge factor, "for the killing of the whale;" and, as this appears to have been the first voyage undertaken expressly for that purpose, it is stated, that "they have bin at the charge of procuring of sixe men of *Saint John de Luz* accustomed to that function." Jonas Poole accompanied this ship as master of the Elizabeth, with two others, which were to proceed, one to St. Nicholas or Archangel, the other to Nova Zembla. While the ships were engaged in fishing, Poole stood to the northward as high as 80°, near Spitzbergen, then crossed to the east coast of Greenland, near *Sanderson's Hold with Hope*, and says he ran about forty leagues to the westward of the eastern-most part of the land as it was then laid down in his charts; he next stood across to Cherry island, and again proceeded to Spitzbergen, where he found part of the crew of the large ship on shore, she having been lost in the ice; they afterwards were taken on board a vessel from Hull, which carried them home.

The next year, 1612, the same company of merchants sent out two ships, the *Whale* and the *Seahorse*, under JONAS POOLE. On their arrival at Cherry Island they found a ship from Holland, in which one Alan Salowes, an Englishman, was

pilot. This is not the first Dutch ship that was employed on the whale fishery. One *Jan Mayen*, the preceding year, discovered an island to the northward of Iceland in about 71° of latitude, which still bears his name; and which for several years was a sort of fishing station of the Dutch, till their frequent visits and the boiling their blubber on shore frightened away all the whales and sea morses; of late years it has rarely been approachable on account of the ice. From Cherry Island, Poole proceeded to Spitzbergen; and being in *Foul Sound*, the said Alan Salowes came on board and reported, that his merchant (the Dutchman) "had broke his necke down a cliffe." Here also Poole met with one Thomas Marmaduke, of Hull, in a ship called the *Hopewell*, which, however, soon left them and stood to the northward. "This ship," (Poole says,) "as we were afterward informed, discovered as farre as 82 degrees: two degrees beyond Hakluyt's Headland." This is the highest degree of latitude mentioned to which any ship had yet proceeded, except we give credit to the account supposed to have been received from Adams by the Jesuits of Japan.

This voyage is chiefly curious on account of the rapid progress which appears to have been made in the art of killing whales by the help of the Biscayans; not fewer than thirteen having been taken by Poole's ship alone, besides many others by a vessel from London, by another from Hull,

and by one from Biscay, having an English pilot on board.

In the year 1613 the same company sent out six ships and a pinnace to fish on the coast of Greenland, (Spitzbergen,) in one of which was the celebrated navigator WILLIAM BAFFIN; and so rapidly had the fame of the fishery spread over the maritime nations of Europe, that no less than eight Spaniards, two Dutchmen, four Frenchmen from Dunkirk, besides some Biscayans, were this year assembled in the sea of Spitzbergen; one of the ships of Biscay being seven hundred tons, and others from two to three hundred tons. "The first," says Baffin, "we expected would have fought with us, but they submitted themselves unto the generall." The English having taken possession of the whole country in the name of his Majesty, prohibited all the others from fishing and sent them away, excepting such as they were pleased to grant leave to remain.

In this voyage the extraordinary refraction of the atmosphere is first noticed by Baffin, who frequently observed a considerable difference in the latitude of the same place deduced from the altitude of the sun above and from that below the pole. The quantity of this refraction he therefore endeavoured to ascertain by an observation of the sun when on the meridian below the pole, when one fifth part of his body only appeared above the horizon, and the result gave him twenty-six minutes; "but," observes this intelligent navi-

gator, "I suppose the refraction is more or lesse, according as the ayre is thicke or clear, which I leave for better schollers to discusse."

On the 6th September, all the ships arrived safe in the Thames, with a good store of oil and bone.

The last successful voyage induced the company to send out in 1614, ten ships and two pinnaces, besides the *Thomasine*, intended for discoveries, under the orders of ROBERT FOTHERBY. Baffin was likewise on this voyage, but the relation of it is given by Fotherby, and contains nothing deserving of particular notice. Being much hampered with ice, the ship intended for discovery got very little beyond the north-eastern extremity of Spitzbergen. BAFFIN was again, in 1615, sent on northern discovery in the pinnace called the *Richard*, of twentie tons, but got no farther north than Hakluyt's Headland; he mentions however his having marked down on a map, "how farre the state of this sea is discovered betwixt eighty and seventy-one degrees of latitude; and with regard to the probability of a passage by the pole," he says, "for as much as it appears not yet to the contrarie but that there is a spacious sea betwixt Greenland, and *King James* his *New Land*, (Spitzbergen) although much pestered with ice: I will not seem to dissuade this worshipfull companie from the yeerly adventuring of £150 or £200 at the most, till some

further discoverie be made of the said seas and lands adjacent," which he thinks might very well be performed by the little pinnace with a crew of ten men. For several years after this the whale fishery proved successful, till at length the Dutch fairly drove the English from this lucrative branch of trade.

JENS MUNK. 1619.

The discoveries of Hudson and Baffin once more turned the attention of the slumbering Danes towards their lost colonies on the coasts of Greenland, and perhaps held out to them a hope of completing the long-sought-for passage in that direction to the Indies. Accordingly in the year 1619, Christian IV. caused two ships to be fitted out on a voyage of discovery, the command of which was given to an experienced seaman of the name of JENS MUNK. The vessels, it would seem, were chiefly manned with English sailors, who no doubt had been employed on some of the former expeditions for making discoveries, or on the whale fishery. Munk left Elsineur on the 18th May, and on the 20th June made Cape Farewell, and endeavoured to stand up Davis's Strait, with the intention, as it would seem, of pursuing the track of Baffin and Bylot; but he found his vessels so perpetually hampered with ice, that he returned

along the coast to the southern extremity, from whence he passed through Hudson's Strait, the name of which he thought fit to change to that of Christian's Strait, *(Fretum Christiani.)* The northern part of what is called Hudson's Bay, he converted into *Mare Novum*, the New Sea, and the southern and eastern side he changed into *Mare Christianum*, Christian's Sea; and either he, or the publisher of his voyage, has accompanied it with a chart in which the whole geography of Hudson's Sea and its islands is upset and distorted. He made the coast of America in 63° 20′, where, meeting with much ice, he was compelled to seek for shelter in an opening in the land which he called *Munk's Winter Harbour*, and to the surrounding country he gave the name of *New Denmark*. This harbour must be that which has since been named *Chesterfield* or *Bowden's Inlet*. The year being far advanced, (having entered the harbour on the 7th September,) and seeing no likelihood of being able to cross Hudson's Sea and Strait, he took the precaution of first hutting himself and his people, and then exploring the neighbouring country, which luckily afforded them a plentiful stock of game, consisting of white bears, black foxes, hares, partridges, and other birds. On the 27th of November there appeared in the heavens three distinct suns, and again two, equally distinct, on the 24th January. On the 18th of the preceding December, there was an eclipse of the moon, and

the night this luminary was environed by a transparent circle, within which was a cross, cutting through the centre of the moon, and quartering it—this phenomenon was regarded as the harbinger of those misfortunes which soon befel them. The frost had set in with such severity that the wine, brandy, and beer, were entirely frozen, and the casks burst with the intense cold. The scurvy began to make its appearance among the crews of the two vessels, consisting of forty-eight persons in the one, and sixteen in the other.* The spring of the year brought with it no relief to their misery. Their bread and provisions were exhausted, and none of them had strength enough to take any of the ducks, geese, partridges and other fowl which came around them in infinite multitudes. They were reduced to a most helpless and deplorable state, and the mortality became almost general. Towards the beginning of the month of May 1620, those who had survived had the misery of knowing that the whole of their provisions were consumed, and that famine was now added to disease. They had no strength left to pursue the animals which surrounded them. Munk himself, reduced to the last extremity, remained alone in a little hut in so hopeless and

* In a Danish M.S. it is said that the disease was mostly occasioned by the almost unrestrained use of spirituous liquors, which are known to be particularly destructive in a cold climate.

desponding a state, as to expect nothing but death. At length however, pressed by hunger, he had the resolution to crawl out of his hovel and inquire into the fate of his unhappy companions; he found only two alive, all the rest having perished. These three men encouraged each other to make an attempt to procure some species of food; they scratched away the snow and found some plants and roots, which they eagerly devoured. By degrees they were able to take fish in the river, as the ice disappeared, birds, and other animals. They now thought of getting home, and for this purpose equipped the little vessel from the stores in the large one; they re-passed Hudson's Strait, and after a stormy passage, in which the ship was almost abandoned to herself, they arrived safely in a port of Norway on the 25th September.

They were received in Denmark as men risen from the grave: and the recital of their adventures and sufferings created a general sympathy in their favour. Such indeed appears to have been the interest excited by these new discoveries that Munk, notwithstanding his sufferings, once more proposed to make the attempt to discover a north-west passage. A subscription was set on foot for that purpose, and every thing was made ready for his departure. On taking leave of the court, the conversation turned on the misfortunes of his former enterprize, and the King, in admonishing him to be more cautious than in his last

voyage, seemed to ascribe the loss of his people to some mismanagement. Munk feeling sensibly this reproof, answered in a manner less respectful than that to which the royal ear had been accustomed, and the King, forgetting all decency and moderation, struck him a blow with his cane. The indignity thus sustained by the unfortunate navigator was never to be effaced, and he is said to have taken his bed and died of a broken heart a few days afterwards.

There is an air of romance thrown over a great portion of the narrative of Munk's voyage; their unparalleled sufferings—the survival of the three persons only—their recovery from death's door by eating grass and roots—their being able to get provisions for a voyage across the Atlantic—and bringing home one of the vessels—are things not physically impossible, though not very probable; and the conduct of the King is most likely one of those stories which have been repeated over and over again, from one and the same source, without the slightest foundation in truth. Forster indeed mentions, but without giving his authority, that the same Munk was after his return employed by the King in the years 1624, 25, and 27, in the north sea, and on the Elbe; and that he died on the 3d June 1628, in the course of a naval expedition.*

* History of the Voyages and Discoveries, &c. p. 471.

LUKE FOX. 1631.

The last voyage of Baffin and Bylot in 1616, which, from its uninterrupted northern progress, might have been expected to raise the hopes of the adventurers and of the nation, for a successful issue of the oft-attempted passage, would seem, on the contrary, to have cast a damp over the minds of its most sanguine advocates; with the exception of one attempt, under the direction of a person of the name of Hawkridge, who sailed with Sir Thomas Button, the project seems to have been entirely given up. It is scarcely known under whose employ, in what ship, or even in what year, Captain Hawkridge sailed on this expedition. From the meagre fragment of the voyage as given by Fox,* which, he says, he procured "in manuscript or by relation," it is evident at least that he added nothing to former discoveries in the north-west.

The revival of an attempt to discover a north-west passage is unquestionably owing to Captain LUKE FOX, who, by his own account, had continued with unabated zeal to urge a new expedition, for exploring the arctic seas; which, he says, "he had been itching after ever since 1606, when he wished to have gone as mate to John Knight."

* North-west Fox, p. 166.

He succeeded at length in persuading Mr. Henry Briggs and Sir John Brooke to petition His Majesty Charles I. for the loan of one of his ships, and for his countenance of the voyage, who, we are told, "graciously accepted and granted both." Fox says he was allowed to chuse his own ship, and that he pitched on a pinnace of the burden of 80 tons, which was named the *Charles*, manned with twenty men and two boys, victualled for eighteen months, and well fitted in every respect. Sir Thomas Roe and Sir John Wolstenholme were appointed to superintend the fitting out of this enterprize, and the master and wardens of the Trinity House were ordered to give their assistance. The narrative of the voyage is written by Fox himself, who affectedly assumes the name of the *North-west Fox*. He was a keen shrewd Yorkshireman, and evidently a man of considerable talent, but conceited beyond measure; and the style of his journal is so uncouth and the jargon so obscure and comical, as in many places to be scarcely intelligible. "Gentle reader," he thus begins, "expect not heere any florishing phrases or eloquent tearmes; for this child of mine, begot in the north-west's cold clime, (where they breed no schollers,) is not able to digest the sweet milke of Rethorick," &c.

He leaves England, however, highly satisfied both with himself and with his equipment. "I was victualled," says he, "compleatly for eighteen

moneths; but whether the baker, brewer, butcher, and others were masters of their arts or professions or no, I know not; but this I am sure of, I had excellent fat beefe, strong beere, good wheaten bread, good Iseland ling, butter and cheese of the best, admirable sacke and aqua-vitæ, pease, oat-meale, wheat-meale, oyle, spice, suger, fruit, and rice; with chyrurgerie, as sirrups, juleps, condits, trechissis, antidotes, balsoms, gummes, unguents, implaisters, oyles, potions, suppositors, and purging pils, &c." And on taking leave he received, he says, from the King "a mappe of all my predecessors discoveries, His Majesty's instructions, with a letter to the Emperour of Japan."*

The merchants of Bristol, determined not to be out-done by those of London in manifesting a spirit of enterprize, fitted out the same year, and for the same object, a ship called the Maria, the command of which was given to Captain Thomas James.

Fox left Deptford on the 5th May, passed Cape Farewell in a fog and drizzling mists on the 13th June, and, on the weather clearing, observed a shoal of grampusses following their leader, which, he tells us, brought to his recollection "Mr. William Browne in his Britaines Pastorals, where he writes 'the Tritons wafted Thetis along the British shores.'" On the 20th he got sight of the land

* North-west Fox.

to the northward of Lumley's Inlet, the name of which affords matter for another recollection, namely, that of the Right Honourable Lord Lumley, and his building the pier of Hartepool at his own cost and charge, also the answer of an old man, whom he (Fox) had asked at whose cost the said pier was built? "Marrye, at my good Lord Lumley's, whose soule was in heaven before his bones were cold." This kind of gossipping occurs in almost every page of Fox's journal.

On the 20th he arrives off Cape Chidley; a spot which brings to his fertile recollection *Gibbons* and his hole, but why is not very apparent. The haste with which he endeavoured to pass through Hudson's Strait to the westward, and to avoid the fate of Gibbons, induced some one of his officers to ask him why he was in such a hurry? and his answer was, "that it fared with him as with the mackarell-men of London, who must hasten to market before the fish stinke." Towards the western extremity of the strait he was much hampered with ice, which he observed to be of two kinds; first, mountainous ice, floating about in large masses, "seldome bigger than a great church;" and the second kind is called "masht or fleackt ice, in pieces from a foot or two to two acres, and one or two feet high above the surface." One of the mountainous pieces, larger than the rest, had a rock upon it of five or six tons weight, with several other smaller stones and mud.

On the 10th July he had only reached Salisbury Island, where he observed that "the compasse doth almost loose his sensitive part," which he ascribes to "the sharpnesse of the ayre, interposed betwixt the needle and his attractive point;" or, "here may be some mountaines, of the one side or the other, whose minerall may detaine the nimblenesse of the needles moveing to his respective poynt; but this I leave to philosophie."

Mr. Fox is not very happy in his description of a sea unicorn which passed the ship. "He was of length about nine foot, black ridged, with a small fin thereon, his taile stood crosse his ridge, and indented between the pickends as it were on either side with two scallop shels, his side dappled purely with white and blacke, his belly all milke white, his shape from his gils to his taile was fully like a makarell, his head like to a lobster, whereout the fore-part grewe forth his twined horn, above six foote long, all blacke save the tip."

The 20th July, near Carey's Swan's-nest, "was a hot day as any in England, the *Henban* flashing all night," and at midnight "here was in the ayre many *pettit-dancers*," (so he calls the aurora borealis.) In coasting along the eastern shore of America he falls in with an island, in which were numerous burying places of the natives, and names it *Sir Thomas Rowe's Welcome;* and to another island he gives the name of *Brooke Cobham*, and to a little group of islands *Briggs his Mathema-*

tickes. In the burying grounds of Sir Thomas Rowe's Welcome they found many corpses, wrapped in deer-skins, and laid under stones with their heads to the west, the longest of which, Fox says, was not above four feet long. The bodies were enclosed with planks nine or ten feet long and four inches thick, a whole boat load of which they carried off for fire wood. With the bodies were deposited bows, arrows, lances, darts, and other implements carved in bone. Many of the darts were headed with iron, but one had a head of copper; which makes him conclude that some Christians might have been there before him.

From the Welcome Fox stood again to the southward, looking into *Hubert's Hope*, and the day light, he says, enabled him to see the bottom of "vainely Hoapt Hulbert." On the 9th August he goes into Port Nelson, for reasons assigned in long and minute detail, but not of sufficient interest or importance to transcribe. Here they found a cross which had been erected by Sir Thomas Button, still bearing his name. From Nelson's River Fox stood across the bay to the south-eastward, and on the 29th August fell in with Captain James, on board whose ship he went and "was well entertained and feasted;" for which, however, he makes but a scurvy kind of return, speaking thus slightingly of his brother navigator: "The gentleman (meaning James) could discourse of arte, as observations, calculations, and the like, and

shewed me many instruments, so that I did perceive him to bee a practitioner in the mathematicks; but when I found that hee was no sea-man, I did blame those very much who had councelled him to make choyce of that shippe for a voyage of such importance, for to indure two winters in, as he must have done, if hee had any such intent, before hee could come about Bona Sperance home; our discourse had been to small purpose if wee had not pried into the errours of our predecessors, (and being demanded) I did not thinke much for his keeping out his flagg; for my ambition was more ætherial, and my thoughts not so ayerie, so to set my sight towards the skie, but when I either called to God or made celestiall observation; to this was replide, that hee was going to the Emperour of Japon with letters from His Majestie, and that if it were a ship of His Majesties of 40 pieces ordnance hee could not strike his flagg; (keepe it up then, quoth I) but you are out of the way to Japon, for this is not it;"—and a great deal more of such stuff.

Fox, having coasted a considerable time towards the bottom part of Hudson's Bay to no purpose, again directed his course to the northward on the 4th September, naming the cape he last parted from *Wolstenholme's Ultimum Vale*; "for that I do believe Sir John Wolstenholme will not lay out any more monies in search of this bay." On the 8th he had advanced to the land on which is Carey's

Swan's-nest, and observes, that "every night here are petti-dancers, and red fire flashes in the ayre most fearfull to behold." Proceeding to the northward he passes a cape, to which he gives the name of *King Charles his Promontorie*, and to another *Cape Maria*, "in a most bounden and dutifull remembrance of my King and Queene, drinking their health with the young princes." The first he estimates to be in about latitude 64° 46′, and the second eight leagues to the northward; and he calls three islands, lying N.W. of the promontory, *The Trinitie Isles*, "in the remembrance of the House of Deepeford Strand." To a headland lying some minutes within the arctic circle he gives the name of my *Lord Weston's Portland*, to another *Cape Dorchester*, and to the land beyond this *Fox his Farthest*. On the 25th September he begins to think that they had made but "a scurvie voyage of it," and that in his opinion it was the best they could do to bear up homewards; and accordingly he made sail out of Hudson's Strait, and arrived in the Downs on the 31st October, with all his men recovered and sound, "not having lost one man nor boy, nor any manner of tackling, having beene forth neere six moneths, all glory be to God."*

Fox complains that he got no reward for his trouble; in fact, the result of the voyage evidently

* North-west Fox.

disappointed those who had been instrumental in promoting it. He, however, maintains stoutly the probability of a north-west passage, and that it will be found in Sir Thomas Roe's Welcome,* where the tide was observed to come from the northward, and to rise higher than in any other part of Hudson's Bay; he also observed a great number of whales about this part, which he conceives to indicate its proximity to the great sea. It is rather surprizing that Fox, who was evidently a man of great sagacity, should not have persisted, on his first arrival on the coast of America, in tracking the current to the northward, from whence he observed it to flow, instead of following it to the southward. On his second arrival in the Welcome the season was too far advanced to prosecute the discovery to the northward.

THOMAS JAMES. 1631.

Captain James was furnished with similar credentials from Charles I. to those which were given to Fox. He left Bristol in the *Maria*, of seventy tons, on the 3d of May, 1631, passed Cape Fare-

* The name of *Welcome* was first given by Fox to an island; but has since been applied indiscriminately to the north-eastern coast of America, and to the strait lying between that coast and Southampton Island; but more generally to the latter.

well on the 9th of June, and on the 17th saw the island of *Resolution*, not, however, before he had many fields and islands of mountainous ice to encounter, with a black looking sea, a continual mist or fog, which is described as thick, heavy and stinking; and the air so piercing as to affect the compass and cause a sluggish and impeded motion in the magnetic needle. In endeavouring to push through Hudson's Strait, the ship was almost continually beset with ice, and sometimes driven about at the mercy of the tides and currents. To add to their distress in this situation, the sails were frozen stiff and the rigging hanging with ice. If Fox was conceited in consequence of the knowledge he had acquired from studying the voyages of his predecessors, James seems to have been more culpably conceited in his total ignorance of all that had been done before him; he not only appears to have been wholly unacquainted with the narratives of preceding voyagers, but purposely, as he tells us, refused to take with him any person who had previously been employed in a voyage of northern discovery, or on the Spitzbergen fishery; the consequence of which was, that as soon as they found themselves surrounded with ice, they were wholly ignorant how to manage the ship, and their want of experience not only alarmed them, but had nearly proved fatal to the ship and all on board; for, in endeavouring to avoid the ice, the ship settled upon a sharp rock, and the tide, then ebb-

ing, left her hanging by the middle, and she fell over to such a degree that they could not remain on her. "Having now done," says James, "to the best of our understandings, but to little purpose, we went all upon a piece of ice and fell to prayer, beseeching God to be merciful unto us." The flowing tide brought her upright and floated her off; "then was our sorrow turned to joy, and we all fell on our knees, prasing God for his mercy in so miraculous a deliverance." The ice, however, continued to increase to such an extent on all sides, that they were unable to see from the mast head the space of an acre of open sea; but a change of wind dispersed it, and after many difficulties and dangers, and much wailing, they reached Salisbury Island on the 5th of July, and on the 15th, still much pestered with ice and imagining "a thousand times that the ship had been beaten to pieces," they got between Nottingham and Digges's Islands.

It would be tedious as well as useless to follow Captain James in his slow progress to the southwestward in Hudson's Bay. From his own utter ignorance, and that of all hands on board, of the manner of conducting a ship among ice, she was almost constantly beset, and frequently remained unmovable with all her sails spread. It was not to be wondered, therefore, that the people began to murmur and to fancy that they were likely to pass the winter in the midst of fields of ice and snow;

especially as the 1st of August had arrived without their having made much progress to the westward. On the 29th they fell in with the Charles, under the orders of Fox. Shortly after a tremendous gale of wind, accompanied with snow and hail, put them into the utmost peril; the waves broke over the ship "with that tearing violence," says James, "that not I, nor any that were then with me, ever saw the sea in such a breach." She took in the water at both sides and at both ends; it ran into the hold and into the bread-room; "for the sea so continually overreached us, that we were like Jonas in the whale's belly." On the 12th of September they contrived to run the ship aground again among the rocks on the coast of America, in about the latitude of 52½°, and conceiving that she had now got her "death's wound," they threw into the boat some carpenter's tools, a barrel of bread, a barrel of powder, some muskets, matches, fishing-hooks and other materials, which they sent ashore, "to prolong a miserable life for a few days." She drove off, however, and was found to be less injured than they had expected. At length, after all manner of perils, they came to an island on the 2d of October, which was called, by James, the Earl of Danby's Island; but now known generally by the name of Charlton Island, lying in lat. about 52°.

After some time spent in determining what to do, and in exploring the island, the sick men

wished for a hovel on shore, which was accordingly built and covered over with the mainsail. A few deer was all that the island seemed at first to produce, but on the winter setting in many black foxes made their appearance; in looking for which, the gunner's mate, in crossing a frozen pond, fell in, and the ice closing upon him they saw him no more.

Before the end of November every thing was covered with frost and snow, and the ship appeared to be one great mass of ice. On the 22d the gunner died,—" an honest and a stout-hearted man." His leg had been amputated, and notwithstanding the constant fire kept up in his cabin, " his plaisters would freeze at his wound, and his bottle of sack at his head." The constant danger to which the ship was exposed from the drift-ice, and foul ground, and perpetual storms, determined them to remove all the provisions to the shore and quit her altogether, which was accordingly done on the 26th of November; and it is stated, that when they joined their sick companions on shore " they could not know us nor we them, by our habits and voices, so frozen we were, faces, hair and apparel." A dismal account is given of their noses, cheeks and fingers being frozen as white as paper, and of blisters being raised as large as walnuts. The well which they had dug froze up, and melted snow-water is pronounced to be very un-

wholesome, either to drink or to dress victuals; "it made us so short-breath'd that we were scarce able to speak"—"all our sack, vinegar, oil, and every thing else that was liquid, was now frozen as hard as a piece of wood, and we cut it with a hatchet; our house was all frozen in the inside, and it froze hard within a yard of the fire-side"—and all this happened before the middle of December, and in a latitude not thirty miles to the northward of that of London.

In the month of January, James determined the latitude of his winter quarters to be 51° 52′, and ascribes the great difference between this and a former observation to the effects of refraction; and, as a proof of it, the disc of the sun, when near the horizon, appeared to be twice as long as it was broad; and by observations it was found that, owing to the refractive power of the atmosphere, the sun rose full twenty minutes before and set twenty minutes after the regular time. And on two nights, in particular, he observed more stars in the firmament, by two-thirds, than he had ever seen before.

In February the scurvy began to make its appearance among the crew, exhibiting the usual symptoms of weakness, swelled legs, sore mouths, black turgid gums, and teeth loose in the jaw. As the spring advanced the cold increased; and it is remarked, that the people found it "more mor-

tifying cold to wade through the water in the beginning of June, when the sea was full of ice, than in December, when it was encreasing." It does not seem to have occurred to Captain James that this feeling was not occasioned by a greater degree of absolute cold, but by the greater difference between the temperature of the air and that of ice-water in June, than in December.

Towards the middle of April they began to clear away the ice out of their ship, and to see what could be made of her. In the hold they found some beer and wine which had not been frozen, and which was a great comfort to the sick whose condition is described as being most deplorable. The death of the carpenter was a great interruption to their proceedings, but they contrived to supply his place by one or two who could handle a tool. At length, on the 1st of July, all was ready for a start; the ship's colours were hoisted on the poop and in the main-top, and the following day they made sail; but such was the captain's predilection for the shore and shoal water, that even at this advanced season of the year, and in the low latitude of 52°, the ship "did so strike against the ice, that her fore part would crack again, and make our cook and others run up all amazed and think the ship had been beaten all to pieces."

Captain James, indeed, contrived, in the whole of his northern passage, to be hampered with ice

daily and almost hourly; so that it took them from the 2d of July to the 24th of August to run over $7\frac{1}{2}$ degrees of latitude. On this day they saw Nottingham Island, where the whole sea was covered with ice. On the 26th he asked his officers for their counsel and advice—in what manner he should proceed; who gave in writing their unanimous opinion that he should repair homewards; an opinion which was accordingly adopted, and on the 23d of October he arrived in Bristol roads.

Captain James's history of his voyage may be called a book of "Lamentation and weeping and great mourning;" it is one continued strain of difficulties and dangers and complainings from the first making of the ice off Cape Farewell, till his return to the same point. The observations it contains are at this time of no use whatever, though it is said that Mr. Boyle derived much information from it in composing his Treatise on Cold. At that time the thermometer had not been brought into use, nor any instrument known to measure the degree of absolute cold; but the sufferings of his crew, from its great intensity, could only have arisen from mismanagement, as the people belonging to the Hudson's Bay Company pass the winters comfortably enough along the line of coast near to which Charlton Island is situated, and eight or ten degrees farther to the northward. Of the slow dissolution of the ice he

his the following observation:—"I have in July, and in the beginning of August, taken some of the ice into the ship and cut it square, two feet, and put it into the boat where the sun shone, with a very strong reflection about it, and notwithstanding the warmth of the ship, for we kept a good fire, and all our breathings and motion, it would not melt in eight or ten days. It was our practice, where we should be two days, to get her fast to a piece of ice, to set marks to it, to see how it consumed, but it yielded us small hope of dissolving; we could not, in that time, perceive any diminution by the sinking of it, or otherwise; nevertheless I think that it is ruined by storms, or consumed by heat some years, or else the bay would be choked up; but I confess these secrets of nature are past my comprehension."*

With regard to discovery, James contributed nothing to what former navigators had effected; yet he boldly asserts the improbability of a north-west passage, for reasons which he might just as well have assigned prior to his voyage, and spared himself and his people the sufferings they underwent on Charlton Island. But, as Doctor Campbell has observed, "all the difficulties and discouragements, which, from too strong a sense of his own disappointment, Captain James has conjured up, sink to nothing, when duly considered and compared with the circumstances that later disco-

* *Harris's Collect. of Voy. and Travels*, vol. ii. p. 428.

veries have brought to light; so that there seems to be no reason his conjectures should have any weight to deter us from prosecuting attempts on this side, even though they should still continue to prove, in several instances, as they have hitherto done, abortive."*

CAPTAIN DANELL. 1652.

Frederick III. king of Denmark, in the year 1652, commanded CAPTAIN DANELL to undertake an expedition to discover East Greenland. He set sail from Copenhagen on the 8th of May, 1652, with two vessels, and proceeded to the north of Iceland. Then taking a westerly course, he perceived the coast of Greenland on the 2d of June, at the distance of about thirty miles, in lat. 64° 50′; but could not approach it nearer on account of the ice. In the N. E. at about three miles distance, they saw two small islands, which they named *Hvidsolen* and *Mastelos Skib.* On the 4th they again saw land, which was very high, and appeared to be covered with ice. This land was about thirty-two miles from them; they sailed among some little islands; the ice extended from the coast eighteen or twenty miles into the sea. On the 6th of June they saw five small islands in lat. 65°, when fourteen miles distance from them;

* *Harris's Collect. of Voy. and Travels*, vol. ii. p. 428.

they were all covered with snow, excepting one of them, about four miles long, of a blackish colour, but the ice prevented them from approaching it. These islands were eighteen or twenty miles from the land. The water between them was of a brown colour, but they found neither fish, birds, nor seals. The mountains on the shore were visible at sea at the distance of nearly sixty miles. The most northern cape they saw, in 65° 30′, received the name of the *Cape of King Frederick*. They coasted along the land, running to the S. W., but they could not in any place penetrate the ice, which however was neither continuous nor firm enough to support them when they wished to walk upon it towards the land. On the 10th of June they were in latitude 63° 10′, at twenty-five miles from the land. On the 12th, in lat. 62°, they saw a mountain split in two at fifteen or sixteen miles to the westward of them. There were several small bays on the coast, which here seemed to be the best country they had yet seen in Greenland, but the ice prevented them from approaching it nearer than twenty miles. They doubled Cape Farewell and sailed up along the western coast of Greenland, and remained on that coast till the 16th of July. On the 18th of July they repassed Cape Farewell, and on the 22d of July, in 61° 30′ latitude, they again discerned the eastern coast of Greenland seventy miles to the N. W., and in two places they fancied they saw buildings with turrets on them. On the 23d of

July, in latitude 61°, they saw a bay between two high mountains, and they would have entered it if the night had not prevented them. For several days following they continued to see land, which they approached within four or five miles, but had no means of reaching it on account of the ice. They coasted along it as high as 63° 30′ of latitude, but were obliged at length to give up their endeavours to approach it, and returned to Denmark. Captain Danell set sail again from Copenhagen on the 16th of April, 1653, went to the north of Iceland as far as latitude 73° beyond that of the island Jan Meyen, and then took the direction of S. W. and W. S. W., and on the 13th of June, in latitude 64°, saw something blue in the horizon which he conjectured to be Cape King Frederick. On the 19th of June he saw Herjolfsnes in Greenland in latitude 64°, but the ice was twenty-four or five miles from the coast. He coasted along as far as Cape Farewell, but always at the distance of forty-five or fifty miles from the coast, on account of the masses of ice; and he repaired to the western coast of Greenland, from whence he returned to Denmark.

ZACCHARIAH GILLAM. 1668.

The lapse of forty years nearly without any attempt being made for the discovery of a passage into the South Seas, either by the north-east or the

north-west, is the strongest proof of the light in which the voyages of Fox and James had been considered; and that all further attempts were looked upon as hopeless. It would appear, however, that a voyage had been undertaken to Hudson's Bay, in the intermediate time, from New England, either for the purpose of fishing or discovery. The French, after possessing themselves of Canada, crossed over the land to the shores of Hudson's Bay. Among the first was one M. de Grosseliez, a bold and enterprizing man, who, seeing the advantage that might be derived to the French settlements in North America, by possessing themselves of the ports and harbours of Hudson's Bay, prevailed on some of his countrymen at Quebec, to fit out a ship for the purpose of exploring the coasts of that bay, in which he proceeded himself. Having landed late in the season on the western side of the bay, near to Nelson's River, some of his people returned with an account of their having discovered an English settlement; upon which he proposed to attack and, if possible, to take possession of it; but, on approaching the spot, a solitary hut only was discovered, in which were found half a dozen miserable wretches on the point of perishing from disease and famine. These unhappy men told Grosseliez, they were part of the crew of a ship from Boston, who had been sent on shore to look out for a proper place for the ship, to which they belonged, to lie in safety during the winter, and

that while on this service the ship had been driven away with the ice by a storm from her anchorage, and had never returned. This part of the story seems to rest on the authority of M. Jeremie, the governor of Port Nelson, after it had fallen into the hands of the French; but, whether true or false, it appears to have given rise to one of those ingenious fabrications which were frequently the means of keeping alive a spirit of discovery when otherwise it might probably have died away. The fabrication alluded to is the account of a Spanish expedition from the South Sea, through the interior of America, by means of rivers and lakes, into the Northern Atlantic. It first appeared in an English dress, and in an English periodical publication, called *The Monthly Miscellany, or, Memoirs for the Curious*, for the month of April, in the year 1708. The name of the Admiral, selected for the commander of this expedition, was *De Fonte*, a name mentioned by the burgomaster Witsen, as being celebrated for a voyage to Terra del Fuego, made in 1640, at the cost of the King of Spain. This admiral, passing up the gulf of California, dispatches one Barnarda up a fair river into a lake full of islands, which he names Valasco, where he left his ship and proceeded several hundred leagues in large Indian canoes, called Periagos. At the same time the admiral got into the Lake *Belle*, and, passing through a strait to the eastward, came to an Indian town, where he learnt that at a little distance from

thence lay a great ship; he accordingly sailed thither, and found only one man advanced in years and a youth; the ship, they told him, was of New England, from a town called Boston; presently the owner himself appeared, whose name was Seimor Gibbons, along with Captain Shapeley, the pilot or navigator of the vessel. In the meantime Barnarda sent intelligence that there was no communication out of the Spanish sea by Davis's Strait, which terminated in a fresh lake of about thirty miles in circumference in the 80th degree of north latitude—and this spurious admiral De Fonte ends his narrative by saying that he returned home, "having found that there was no passage into the South Sea by that which is called the north-west passage."

This "adventurous piece of geography," as Captain Burney calls it,* had also, like the voyage of Maldonado, its defenders in two members of the French academy, Messrs. De L'Isle and P. Buache, the former of whom not only translated the English narrative, but accompanied it with a map, drawn jointly between him and Buache, by way of illustrating the routes of De Fonte, and his Captain Barnarda. Mr. Dalrymple, however, conceived it to be an idle piece of invention by one Petiver, a contributor to the above mentioned "*Miscellany*," in which it first appeared; at any

* Chronological History of Voyages and Discoveries, vol. iii. p. 196.

rate, if it had not made at the time some noise in the world, it would now be wholly undeserving of notice.

To return to Grosseliez. Having explored the country bordering on Nelson's River, he departed for Canada, leaving his nephew *Chouart* with five men to winter there; but some disagreement arising between him and his employers, he sent over his brother-in-law to France, to lay before the government a representation of the advantages which might be derived from an establishment on the coast of Hudson's Bay. The project however was treated as visionary; but so strongly convinced was Grosseliez of its great utility, that he set out himself for Paris, where he met with no better success than his brother-in-law had done. The only reason assigned for this indifference of the French government, to form any establishment on the shores of Hudson's Bay, is the dismal account given of the climate, in Captain James's narrative, which deterred them from attempting such a project. Mr. Montague was at that time the English minister at Paris; and hearing of the proposal of Grosseliez, and its rejection by the French government, sent for him to explain his views; they appeared so satisfactory to the English minister that he gave him a letter to Prince Rupert, with which he came over to England. Here he met with a different reception from that of his countrymen; he was imme-

diately engaged to go out in one of his Majesty's ships, which was taken up for the voyage, not merely to form a settlement, but also to prosecute the oft attempted passage to China, by the north-west. In a letter from Mr. Oldenburgh, the first secretary to the Royal Society, addressed to the celebrated Mr. Boyle, he says, "surely I need not tell you from hence what is said here with great joy of the discovery of a north-west passage made by two English and one Frenchman, lately represented by them to his Majesty at Oxford, and answered by the Royal grant of a vessel to sail into Hudson's Bay, and thence into the South Sea; these men affirming, as I heard, that with a boat they went out of a lake in Canada, into a river, which discharged itself north-west into the south sea, into which they went and returned north-east into Hudson's Bay."

CAPTAIN ZACCHARIAH GILLAM was appointed to carry out the Frenchman to Hudson's Bay, and to make discoveries to the northward. He sailed in the summer of 1668, and is said to have proceeded as far north up Davis's Strait as 75°, but nothing appears on record to justify such an assertion. On his return into Hudson's Bay, he entered Rupert's River on the 29th September, and prepared to pass the winter there. The river was not frozen over before the 9th December; and though considerably to the northward of Charlton Island, where James wintered, no complaint is made by Gillam of the

severity or long continuance of the cold, which, on the contrary, is said to have ceased in the month of April. At this place Captain Gillam laid the foundation of the first English settlement, by building a small stone fort, to which he gave the name of *Fort Charles.*

Prince Rupert did not content himself with merely patronizing the voyage of Gillam. He obtained from King Charles a charter, dated in 1669, granted to himself and several other adventurers therein named, for having, at their own cost and charges, undertaken an expedition to Hudson's Bay, for the discovery of a new passage into the South Sea, and for the finding of some trade for furs, minerals, and other considerable commodities; it stated that they had already made such discoveries as encouraged them to proceed farther in pursuance of their said design; and that by means thereof great advantage might probably arise to the King and his dominions; and therefore his Majesty, for the better promoting of their endeavours for the good of his people, was pleased to confer on them, exclusively, all the land and territories in Hudson's Bay, together with all the trade thereof, and all others which they should acquire, &c. This extraordinary charter, with its sweeping privileges, has continued to be vested to this day in the Hudson's Bay Company.

The body of gentlemen and merchants, thus incorporated, soon proved itself to be a body without a spirit, as far as discovery formed a part of

the original design, though this was the chief plea on which the charter had been granted. Their whole attention was turned to the establishment of forts and factories and to extend their trade with the Indians; from whom they procured the most valuable furs for articles of very trifling cost. In this prosperous state of affairs, the north-west passage seems to have been entirely forgotten, not only by the adventurers who had obtained their exclusive charter under this pretext, but also by the nation at large; at least nothing more appears to have been heard on the subject for more than half a century. In the meantime, however, the public attention was once more awakened to the possibility of discovering a passage to the Indian seas by the north-eastward; a new voyage was projected with this design, and was sanctioned by the same monarch who had granted such exclusive privileges to the Hudson's Bay Company.

JOHN WOOD AND WILLIAM FLAWES. 1676.

The question of a north-eastern passage to China had been set at rest in England for more than a century, when it was once more revived by the appearance of a paper in the Transactions of the Royal Society of London, in 1675. This volume of the Philosophical Transactions contained a short statement of a voyage fitted out by a com-

pany of merchants in Holland for the purpose of making northern discoveries; it stated that the ship employed in this voyage had brought back an account of her having sailed to the north-eastward of Nova Zembla several hundred leagues, between the parallels of 70° and 80°; and that the sea in that direction was found to be perfectly open and free from ice; that, in consequence of the navigation of this part of the Tartarian Sea being so easy and uninterrupted, and the passage to China by that route so nearly certain, these merchants had solicited the States-General for a charter, by which the advantages that would result from the discovery of a north-east passage to the Indian seas should be secured exclusively to the adventurers; which however was refused through the intrigues and representations of the Dutch East India Company, to whom already an exclusive charter had been granted.* About this time also there was a very current report of several Dutch ships having circumnavigated Spitzbergen, and that they found the sea open on all sides of it; and another story, equally current, was, that it had been discovered, in searching the journals of Dutch whalers, that, in the year 1655, a certain ship had proceeded to within one degree of the north pole; and that, on three different journals which were kept in the same ship being produced, they all agreed as to an ob-

* *Philosophical Transactions.* 1675.

servation taken by the master on the 1st August, 1655, which determined the latitude to be 88° 56′; and it was further asserted that particular mention was made in these journals, of the sea being there entirely clear of ice, and that it was a hollow rolling sea, like that of the Bay of Biscay. There was besides published, about this time, "A brief Discourse by Joseph Moxon, fellow of the Royal Society," in which the probability of a passage by the north pole to Japan is strongly contended for, and which this ingenious writer conceives to be practicable, from the circumstance of our having no knowledge of any land lying within eight degrees about the pole; and because he had reason to believe, on the contrary, "that there is a free and open sea under the very pole."—As the ground of this belief, he assigns the following circumstance. "Being about twenty-two years ago in Amsterdam, I went into a drinking-house to drink a cup of beer for my thirst, and sitting by the public fire, among several people, there happened a seaman to come in, who, seeing a friend of his there, whom he knew went in the Greenland voyage, wondered to see him, because it was not yet time for the Greenland fleet to come home, and asked him what accident brought him home so soon; his friend (who was the steer-man aforesaid in a Greenland ship that summer) told him, that their ship went not out to fish that summer, but only to take in the lading of the whole fleet, to bring it to an early market.

But, said he, before the fleet had caught fish enough to lade us, we, by order of the Greenland Company, sailed unto the north pole and came back again. Whereupon (his relation being novel to me) I entered into discourse with him, and seemed to question the truth of what he said; but he did ensure me it was true, and that the ship was then in Amsterdam, and many of the seamen belonging to her to justify the truth of it; and told me moreover, that they had sailed two degrees beyond the pole. I asked him if they found no land or islands about the pole? He told me—No, there was a free and open sea. I asked him if him if they did not meet with a great deal of ice? He told me, No, they saw no ice: I asked him what weather they had there? He told me fine warm weather, such as was at Amsterdam in the summer time, and as hot. I should have asked him more questions, but that he was engaged in discourse with his friend, and I could not in modesty interrupt them longer."*

Such accounts as these were amply sufficient to revive the notion of a north or north-east passage, which had so long lain dormant. It has generally happened, in this country, that some individual more sanguine than the rest of the community has, by

* *A Brief Discourse, &c. By Joseph Moxon. Harris's Voyages*, vol. . p. .—*Possibility of approaching the North Pole, asserted by Hon. D. Barrington.*

his superior knowledge, greater exertions, or more constant perseverance, succeeded in bringing about a project to bear, which, in less vigorous or pertinacious hands, would have been suffered to die away. Captain John Wood appears to have been a man of this stamp; he was known as an active and experienced seaman, who had accompanied Sir John Narborough on his voyage through the straits of Magellan; and he now stood forward as the warm advocate for the practicability of sailing by the northward or the north-eastward to the Indian seas and China,—an opinion which he supported in a memorial to the king, assigning seven distinct reasons, and three arguments, for the existence of such a passage.

His reasons were—1. That Captain Barentz had been of opinion that the ice did not extend above twenty leagues from the shores of Greenland and Nova Zembla, and that the intermediate space of one hundred and sixty leagues was open sea. 2. That by a letter from Holland, published in the Philosophical Transactions, it appeared that the Russians had discovered the sea to be open on the north of Nova Zembla. 3. That from the report of some Dutchmen wrecked on the coast of Corea, it appeared that whales were caught on that coast with English and Dutch harpoons in them. 4. The story of the Dutchman told to Mr. Joseph Moxon. 5. The story of the Dutch ship that went within one degree of the pole, told to him by Captain Goulden. 6. The report of Captain

Goulden that all the drift-wood found in Greenland was eaten to the very heart with the sea-worm. 7. The relation of two ships which had sailed three hundred leagues to the east of Nova Zembla, published in the Philosophical Transactions. His arguments were—1. That the pole was fully as warm as under the arctic circle, and that the experience of Greenlanders proved this. 2. Something about winds and fogs, not very intelligible; and 3. That the magnetic influence would not prevent a safe passage across the pole.

These reasons and arguments, together with a polar draught, were presented to his Majesty and the Duke of York. At a board of Admiralty, at which the king, as usual in those days, was present, it was ordered that the *Speedwell* should be appropriated to this service and the command of her given to Captain Wood. And as all voyages of discovery are liable to accidents, the Duke of York, with several noblemen and gentlemen, purchased a pink of 120 tons, called the *Prosperous*, to accompany the Speedwell. To this pink CAPTAIN WILLIAM FLAWES was appointed as commander. Both ships were well equipped for the occasion, victualled for sixteen months, and supplied with such commodities as were likely to turn to the best account on the coast of Tartary and Japan.

The two ships sailed from the Nore on the 28th of May, 1676, and seem to have doubled the North Cape about the 19th of June; but the

journal of Captain Wood is so meagre, that, if it were not for his *supposed* latitudes and his situation "according to judgment," it is not easy to follow his track or to trace his place on any particular day. By the 22d, however, he had reached the lat. 75° 59′, at which time the ice appeared about a league from the ship, and the weather was cold and snowy. They found many openings in the ice which allowed them to proceed, and it is said that the pieces of ice detached by the current from the main field "represented the shapes of trees, beasts, fishes and fowls." Among the ice was observed some floating wood. On the 26th they got sight of land, which was the west coast of Nova Zembla. The depth of the sea was eighty fathoms or 480 feet; yet so smooth and clear was the water, that it is stated "they could discern the ground very plain," and even discover the shells at the bottom. On the 29th, on wearing the Speedwell to avoid the ice, she struck upon a ledge of rocks under water. Fortunately the Prosperous pink was close at hand, though it does not appear that she was then able to afford them the least assistance. They had scarcely succeeded in landing the bread and the carpenter's tools, to rebuild the long boat, in the event of the Prosperous not being able to approach them on account of the ice, when the ship went entirely to pieces, and the fog prevented them from seeing their consort. All the crew, however, were safely got on

shore, except two who were drowned in the pinnace, and all the bread, powder, and provisions then in that boat were spoiled or lost. After the ship had gone to pieces, this loss was amply repaid, as several casks of flour, butter, beef and pork were driven on shore, with spars and other articles, sufficient for making tents and for fuel. No human inhabitants made their appearance, but a great white bear seized hold of the gunner, who, by giving immediate alarm, was saved from his jaws, and the bear killed.

They remained on shore nine days, in a situation of the greatest anxiety, and but ill provided with provisions, ammunition, and clothing; and without seeing any thing of the Prosperous on account of the foggy weather. At the end of this period it was proposed to set out by land towards Waigatz, in the hope of meeting with some Russian vessel to transport them to the continent; when, just at this time, to their unspeakable joy, they espied, on the 8th July, the Prosperous, on which they made a great fire to point out their situation; and on the same day the whole got safely on board that ship. It is not difficult to foresee what would have been the consequences to the whole party had they proceeded; for, as the boat could not carry above thirty men, and there were sixty-six in the whole, "this," Wood observes, "occasioned no small discontent among us, every one challenging the same right with the others; all I could do in

this exigency was to let the brandy-bottle go round, which kept them always fox'd, till the 8th July (the ninth day after we had been on shore) Captain Flawes came so seasonably to our relief." From this time the journal is continued by Captain Flawes; but as it contains only the courses steered and the distances run in the homeward voyage, it is unnecessary to take any further notice of it.

Captain Wood, having thus lost his ship without making the smallest advancement of new discovery, and without having approached by many degrees, either in latitude or longitude, the points already reached by former navigators, boldly decides that he was led into error by following the opinion of William Barentz; that all the Dutch and English relations were false; that Nova Zembla and Greenland (Spitzbergen) are one and the same continent; and that it is unknown hitherto whether Nova Zembla be an isle or adjoining to the continent of Great Tartary. "In justice, however," says Daines Barrington, "to the memories of both English and Dutch navigators, I cannot but take notice of these very peremptory and ill-founded reflections made by Wood, and which seem to be dictated merely by his disappointment in not being able to effect his discovery."*

From a memorandum in Evelyn's Diary, recently

* *Possibility of approaching the North Pole.*

published, it would appear that in the same year that Wood proceeded to the north-east, a Captain Baker had been sent on a voyage of discovery to the north-west, though no voyage of the kind can be traced in that year, either at the instance of the public, or of private adventurers; certainly none but that of the Speedwell was fitted out by the Admiralty. The minute in the diary therefore most probably alludes to the voyage of Wood; and if so, it contains mistakes very unusual to a man of Evelyn's character for sound intelligence and strict accuracy. He says, "1676, July 26, I dined at the Admiralty with Secretary Pepys, and supped at the Lord Chamberlain's. Here was Captain Baker, who had been lately on the attempt of the north-west passage. He reported prodigious depth of ice, blue as a sapphire, and as transparent. The thick mists were their chiefe impediment and cause of their return."*

There can be little doubt that this odd jumble of mistakes, in the date, names, and objects, was meant to refer to Wood's failure, which, to use the words of a learned writer, "seems to have closed the long list of unfortunate northern expeditions in that century; and the discovery, if not absolutely despaired of, by being so often missed, ceased for many years to be sought for."†

* Memoirs of Evelyn, &c.—*Diary*, July 26th, 1676.

† Introduction to Cook's last Voyage by Doctor Douglas, p. 28.

CHAPTER IV.

DISCOVERIES IN THE NORTHERN REGIONS DURING THE EIGHTEENTH CENTURY.

Knight, Barlow, Vaughan, and Scroggs—Middleton and Moor—Moor and Smith — Hearne—Phipps—Cook and Clerke—Pickersgill—Young—Duncan—Lowenorn and Egede—Mackenzie.

JAMES KNIGHT, GEORGE BARLOW, DAVID VAUGHAN, AND JOHN SCROGGS. 1719 to 1722.

Of the unfortunate voyage, undertaken by KNIGHT, BARLOW, and VAUGHAN, very little was ever collected, as the two ships sent out upon it were lost and the whole of their crews perished. MR. KNIGHT, with whom it originated, had been long in the service of the Hudson's Bay Company, and was ultimately appointed Governor of the factory established on Nelson's River. In his communications with the native Indians he had learned, that at some distance to the northward, and on the banks of a navigable river or inlet, into which vessels might go from the bay, there was a rich mine of native copper. On the strength

of this information he came over to England to solicit the Company to fit out two vessels, and send them, under his command, to discover this rich mine; but the Company, for certain reasons which were construed unfavourably to the liberal views of the directors, refused to comply with the proposal of their Governor. Knight, however, did not give up his point. He plainly told them that they were obliged by their charter to make discoveries, as well as to extend their trade; that they were particularly required to search for a north-west passage through the straits of Anian to the South Sea; and that if they still refused to send him and Barlow on a voyage of discovery, he should lay his application before the ministers of the crown; and for this purpose he actually waited on one of the secretaries of state. When the Company perceived him thus resolutely bent on his project, and that his "troublesome zeal," as Robson calls it, "might actually bring on an enquiry into the legality of their charter,"* they thought it necessary to comply, and fitted out a ship and sloop called the *Albany* and the *Discovery*, the former commanded by CAPTAIN GEORGE BARLOW and the other by CAPTAIN DAVID VAUGHAN; Mr. Knight being however entrusted with the sole direction of the expedition. Perhaps they

* An Account of Six Years Residence in Hudson's Bay. By Joseph Robson, Appen. p. 37.

had the less scruple in sending Knight as, by Robson's account, he must have been nearly eighty years of age when he undertook this voyage; of the success of which he was so confident, that he had strong chests made, bound with iron, to hold the gold and copper which he expected to find. This was probably the single object that occupied the mind of Knight; the north-west passage and the straits of Anian were thrown out with no other view than to urge the Company, and to point out to them the necessity, to do something which might wear the appearance at least of satisfying the conditions of their charter.

Knight is accordingly, by his instructions, directed "to depart from Gravesend on the intended voyage, by God's permission, to find out the straits of Anian, in order to discover gold and other valuable commodities to the northward." As neither of these ships ever returned or were heard of, it was concluded they had been lost among the ice, or shut up in some creek or strait from which they had no means of returning; and as the Hudson's Bay Company had sent out these two vessels, they could not do otherwise than dispatch another to look for the unfortunate crews. The *Whalebone* was accordingly ordered to proceed on this service. The person appointed to command her was JOHN SCROGGS, of whose proceedings nothing was ever published, except a brief abstract procured by Mr. Arthur Dobbs. From this account

we learn, that he sailed from Churchill River on the 22d June, 1722. In latitude 62° he had communication with the natives and traded with them. In 64° 56′ he came to an anchor within three leagues of the north shore, to the projecting headland of which he gave the name of *Whalebone Point.* Here he saw many black whales in the water, and several deer on the land. "He had two northern Indians with him who had wintered at Churchill, and told him of a rich copper mine somewhere in that country, upon the shore near the surface of the earth, and they could direct the sloop so near it as to lay her side to it, and be soon loaded with it; they had brought some pieces of copper from it to Churchill, that made it evident there was a mine thereabouts. They had sketched out the country with charcoal upon a skin of parchment before they left Churchill, and so far as they went it agreed very well."*

In latitude 64° 8′, being then in the Welcome, he saw many whales, but no ice. The land from Whalebone Point fell off to the southward of west, and the men who went on shore said they perceived nothing to prevent their going farther; their soundings here were from 40 to 60 fathoms. Captain Norton, late Governor of Churchill, who was then with Scroggs, confirmed all that the latter had stated; said that the tide rose thirty

* *An Account of the Countries adjoining to Hudson's Bay. By Arthur Dobbs, Esq.* p. 80.

feet; that being on shore at the top of a mountain he saw the land fall away to the southward of west, and nothing to prevent their going farther.

In this account there is not a syllable mentioned of any search being made for the unfortunate crews of the two ships; not a single inquiry whether they might be living, or be destroyed by the natives, or have perished from cold and hunger. Many persons, indeed, were sanguine enough to conjecture that Knight and Barlow had discovered the north-west passage, and had proceeded through it into the South Sea to return by the way of Cape Horn; but two years having expired put an end to these delusive hopes: and it was not before the year 1767 that the most unequivocal proofs were discovered of the melancholy fate of these adventurers, and of the whole of their party.

In that year, as some of the boats employed on the Company's whale fishery, near Marble Island, stood in close to the shore, they discovered a new and commodious harbour near the east end of it, at the head of which were found guns, anchors, cables, bricks, a smith's anvil, and several other articles, which, from their weight or uselessness, had not been removed from their original place by the natives. The remains of a house, and the hulls or rather bottoms of the two ships were also discovered under water; and some of their guns and the figure-head of one of the ships were sent home

to England. The following account, given by Hearne, points out the misery to which these poor people must have been reduced on this desolate island.

"In the summer of 1769, while we were prosecuting the fishery, we saw several Esquimaux at this new harbour, and perceiving one or two of them greatly advanced in years, our curiosity was excited to ask them some questions concerning the above ship and sloop, which we were the better enabled to do by the assistance of an Esquimaux, who was then in the Company's service as a linguist and annually sailed in one of their vessels in that character. The account which we received from them was full, clear, and unreserved, and the sum of it was to the following purport.

"When the vessels arrived at this place (Marble Island) it was very late in the fall, and, in getting them into the harbour, the largest received much damage; but on being fairly in, the English began to build the house, their number at that time seeming to be about fifty. As soon as the ice permitted, in the following summer, 1720, the Esquimaux paid them another visit, by which time the number of the English was very greatly reduced, and those that were living seemed very unhealthy. According to the account given by the Esquimaux they were then very busily employed, but about what they could not easily describe; probably in lengthening the long-boat, for,

at a little distance from the house, there was now lying a great quantity of oak chips, which had been made most assuredly by carpenters.

" A sickness and famine occasioned such havock among the English that, by the setting in of the second winter, their number was reduced to twenty. That winter, 1720, some of the Esquimaux took up their abode on the opposite side of the harbour to that on which the English had built their houses, and frequently supplied them with such provisions as they had, which chiefly consisted of whale's blubber, and seal's flesh, and train oil. When the spring advanced, the Esquimaux went to the continent, and on their visiting Marble Island again, in the summer of 1721, they only found five of the English alive; and those were in such distress for provisions, that they eagerly eat the seal's flesh and whale's blubber quite raw as they purchased it from the natives. This disordered them so much that three of them died in a few days, and the other two, though very weak, made a shift to bury them. Those two survived many days after the rest, and frequently went to the top of an adjacent rock and earnestly looked to the south and east, as if in expectation of some vessels coming to their relief. After continuing there a considerable time together, and nothing appearing in sight, they sat down close together and wept bitterly. At length one of the two died, and the

other's strength was so far exhausted, that he fell down and died also in attempting to dig a grave for his companion. The sculls and other large bones of those two men are now lying above ground close to the house. The longest liver was, according to the Esquimaux account, always employed in working iron into implements for them; probably he was the armourer or smith."*

CHRISTOPHER MIDDLETON. 1741.

The circumstances mentioned by Scroggs and Barlow respecting the tides, and the whales observed in the Welcome, the copper mine from which there was so easy a communication with the sea, and the chart made by the native Indians, were considered by a gentleman of the name of Dobbs as being such decisive proofs of a passage into the Great Western Ocean, that, by dint of persuasion, solicitation, and importunity, he succeeded in prevailing on the Hudson's Bay Company to send out two small vessels, for the purpose of examining the eastern coast of the Welcome to the northward of their settlements; and these ships sailed accordingly on this service in the year 1737. It does not appear that any account of their

* *Journey from Prince of Wales's Fort in Hudson's Bay to the Northern Ocean. By Samuel Hearne.* Introd. p. xxxi.

proceedings was ever published; but they are supposed to have reached only to about 62½° of northern latitude, confirming however the former reports of Fox, Button, and Scroggs with regard to the set of the tide from the northward.

Mr. Dobbs, it seems, was by no means satisfied with the proceedings of these two vessels. Indeed he treats the Hudson's Bay Company with very little ceremony, accusing them of intentionally preventing rather than encouraging discoveries. "The Company," he says, "avoid all they can making discoveries to the northward of Churchill, or extending their trade that way, for fear they should discover a passage to the western ocean of America, and tempt by that means the rest of the English merchants to lay open their trade, which they know they have no legal right to; which, if the passage was found, would not only animate the rest of the merchants to pursue the trade through that passage, but also to find out the great advantages that might be made of the trade of the rivers and countries adjoining to the bay, by which means they would lose their beloved monopoly; but though they are fully informed of a fine copper mine, on a navigable arm of the sea north-westward of *Whale Cove*, and the Indians have offered to carry their sloops to it, yet their fear of discovering the passage puts bounds to their avarice and prevents their going to the mine, which by all accounts is very rich; and the

Indians, who have been often at the mine, say it is upon a navigable arm of the sea of great depth, leading to the south-west, where are great numbers of large black fish spouting water, which confirms the opinion, that all the whales seen between Whale Cove and Wager River all come there from the Western Ocean, since none are seen any where else in Hudson's Bay or Strait."*

It is rather singular that, after expressing so strong an opinion against the Company, he should have entered into a correspondence with Captain Middleton, who had for many years been in their service, and, as would appear, not disposed to go against their interests. The facts, however, which he obtained from this gentleman confirmed his former opinions, and rendered in his mind the existence of a passage into the Pacific quite conclusive. On the strength of these facts he prevailed on the Lords of the Admiralty to appropriate

* *An Account of the Countries adjoining to Hudson's Bay.* By Arthur Dobbs, Esq. p. 48.—There can be little doubt that the Hudson's Bay Company were for a long time exceedingly jealous of their monopoly; and that they not only discouraged all attempts at northern discovery, but withheld what little information came to their knowledge; but of late years the governors of this Company have liberally communicated whatever information may have been sent to them respecting the geography and hydrography of Hudson's sea and lands adjoining, as Mr. Arrowsmith can testify. That their servants have not been very active in collecting information is quite true; but the fault is rather to be ascribed to the individuals than to the Company.

a ship of the Navy for the purposes of discovery, and to give the command of her to CAPTAIN MIDDLETON. Accordingly the *Furnace* bomb and the *Discovery* pink were put under his orders, the latter being commanded by Mr. WILLIAM MOOR.

Middleton left England in 1741, and passed the winter in Churchill River, in latitude 58° 56′, where he unaccountably was detained till the 1st July, 1742. Leaving this river he stood along the coast to the northward, and on the 4th saw *Brook Cobham*, which had still much snow lying on it. On the 10th he was in latitude 63° 51′, longitude 88° 34′, the Welcome being here eleven or twelve leagues in width and full of floating ice, from the upper part of which they procured fresh water for the use of the ships' companies.

Having got through the ice, he observed, to the northward of Cape Dobbs, another headland on the north-west side of the Welcome in latitude 65° 12′, longitude 86° 6′ W., beyond which was a fair opening or river six or eight miles in width, which extended within to the width of four or five leagues. Into this opening the ships proceeded to secure them from the ice, until it had dispersed in the Welcome. The entrance into this river, called the *Wager*, lies in latitude 65° 23′. The ice floated in and out with the flood and ebb tides, but a good anchorage was found on the northern side free from the ice in a cove which he called *Savage Sound*.

On the 15th, a lieutenant with nine men well armed were sent in a boat to examine the river; they returned on the 17th, having gone as far up as the ice would permit and until they found it to extend from side to side. The ships therefore fell down the river on the 21st, when, from a high hill a few miles above the entrance, it was perceived that the Welcome was still full of ice from side to side. In one of the excursions up the river it was reported that many black whales and other fish had been observed, whereas none had made their appearance where the ships were anchored, nor below them. This circumstance afforded a hope that there might be some other opening into the Welcome than that by which they had entered. The Lieutenant and the Master were accordingly again sent up with directions to examine all the coves on the northern shore of the Wager. After four days' absence they returned on the 1st August. They reported that they had seen a great many black whales of the whalebone kind; that they had tried every opening they saw; and that they constantly found the tide of flood coming from the eastward or in at the mouth of the Wager. This put an end to all expectations of finding any outlet from the Wager besides that through which they had entered it.

On the 4th of August the ships departed out of the river. In latitude 65° 38′, longitude 87° 7′ W., they entered another opening lying north-west of

Wager River thirteen leagues in width, and on the following day they were in latitude 66° 14′, longitude 86° 28′ W., at which place it had narrowed to eight or nine leagues. Though the tide came from the eastward, the appearance of a fair cape or headland and the trending of the land gave the greatest joy, all believing that this cape would prove the north-east point of America, and Middleton therefore gave it the name of *Cape Hope*.

The next day, when the fog had cleared away, they perceived the land to extend to westward of north, making a deep bay; and standing on towards the bottom of this bay, they saw plainly that they could not proceed above six or eight miles farther. On trying the set of the tide they found it slack water, and concluded therefore that they must have overshot the opening to the eastward at which the tide entered. Here Middleton talks very unintelligibly of a *frozen strait* to the eastward of them. On the 8th, he says, that, at ten in the morning, he went on shore, taking with him the gunner, carpenter, and his clerk, to try if he could find from whence the flood came into this strait or bay. He describes the entrance of the frozen strait, among the islands on the east side, as bearing east two leagues; he travelled, he says, about fifteen miles, to the highest mountain that overlooked the strait and east bay on the other side, and saw the passage the flood came in at; the narrowest part, he says, of this strait is

four or five leagues, and five, six, and seven, in the broadest, almost full of large and small islands, and in length about sixteen or eighteen leagues; to the westward it was full of ice, not broken up, but fast in every part to the shoals and islands in the strait. Finding no hope in that direction, and the ice not being broken up, it was resolved in council to try the other side of the Welcome, from Cape Dobbs to Brook-Cobham, to know if there was an opening there, and then return to England,

They accordingly bore up on the 9th August, stood away to the southward, and on the 15th, after watering the ships at Brook-Cobham, Middleton set sail for England. On his arrival in England, Mr. Dobbs at first appeared to be satisfied that Middleton had done all that could be done, and that a passage by the Welcome was impracticable. But some little time after, when in Ireland, an anonymous letter was received by Dobbs, stating, that the frozen strait was all a chimæra, as was every thing which Middleton had written concerning that part of the voyage. This letter (which was afterwards discovered to have been written by the Surgeon and the Captain's Clerk) aroused suspicions in the mind of Dobbs that Middleton had not performed his duty: on further inquiry, he was satisfied that this was the case; and finally accused him of acting treacherously towards the government, and

of having taken a bribe of £5,000 from his old employers not to make any discoveries. He denies the bribe, but seems to admit that he might have said to some of the Company before he left England, that he would discover the north-west passage and yet that none of those who were with him should be the wiser for it. The dispute ran very high, and several of Middleton's officers took part against him, swearing that he had misrepresented facts, and tampered with them to conceal the truth. Added to all which, Dobbs accused him of not only having slighted examining the material parts of the coast, and the direction and height of the tide, where, by all former accounts, there was the greatest probability of a passage; but that "he even avoided the coast, and passed great part in the night, and has given false accounts of the course of the tides, and has made an imaginary frozen strait, in order to bring a tide of flood through it, to support the false facts he has laid down in his journal, and published in his chart of the course of the tide, from thence to conclude that there is no passage," &c.*—and he adds, "that his whole conduct, from his going to Churchill until his return to England, and even since his return, makes it plainly appear, that he intended to serve the Company at the public ex-

* Account of the Countries adjoining to Hudson's Bay, by Arthur Dobbs, Esq. p. 78.

pense, and contrived every thing so as to stifle the discovery, and to prevent others from undertaking it for the future, so as to secure the favour of the Company, and the reward he said they promised him before he began the voyage."*

The Lords of the Admiralty called on Captain Middleton to answer the strong charges preferred against him by Mr. Dobbs, which he did in detail; but the impression of bribery or treachery had gone forth against him, and it does not appear that the Board of Admiralty was satisfied with his explanation, or, at least, that they approved of his conduct, though he asks them for that approbation. On the contrary, it may rather be inferred, that they considered him culpable; and concurred in opinion with Mr. Dobbs, in the great probability of a north-west passage, which Middleton either would not, or from ignorance could not, discover; for the very next year after his return an act of parliament was passed,† by which a reward was offered of twenty thousand pounds to the person or persons, being subjects of His Majesty, who should discover a north-west passage through Hudson's Strait to the western and northern ocean of America, a discovery which is stated in the preamble to be "of great benefit and advantage to the trade of this kingdom."

* Account of the Countries adjoining to Hudson's Bay, by Arthur Dobbs, Esq.—p. 84.

† 18 Geo. II. chap.

The public opinion in favour of the existence of a north-west passage was not in the least shaken by the failure of Captain Middleton. The charges of misconduct brought against him by Mr. Dobbs, and the arguments of that gentleman in favour of such a passage, ultimately prevailed. The implied disapprobation of this officer's conduct by the Lords Commissioners of the Admiralty, and their recommendation of a liberal reward to be granted for the discovery of such a passage, had the effect that might have been expected. A plan was immediately set on foot for fitting out an expedition of discovery; and to defray the expenses it was proposed that a subscription should be opened, for raising the sum of ten thousand pounds, to be divided into one hundred shares, of one hundred pounds each. A Committee was appointed, and two small vessels purchased, the *Dobbs Galley*, of 180 tons, and the *California*, of 140 tons; the command of the former was given to CAPTAIN WILLIAM MOOR, and of the latter to CAPTAIN FRANCIS SMITH. Mr. Ellis was engaged to proceed on the voyage, as Agent for the Committee. Of this voyage two accounts have been published, one by Mr. Ellis, a plain, unaffected, intelligible narrative; the other by "the Clerk of the *California*," whose

name was Drage, a pedantic, disputatious, dogmatical performance. The following abstract is taken from the journal of Mr. Ellis.*

The two ships dropped down to Gravesend on the 20th May, 1746. They fell in with ice on the 27th June, in latitude 58° 30′, to the eastward of Cape Farewell, and shortly after with abundance of drift-wood, the origin of which causes some vague and certainly erroneous speculations in Mr. Ellis's mind, for he imagines it to come from the west coast of Greenland, where he ought to have known that no wood is produced. He also speculates on the origin of those mountains of ice which float down Davis's Strait, and inclines to the opinion of Hans Egede, which is unquestionably the right one, of their original formation being on the land.

The two ships passed the *Resolution* and the *Savage* Islands, at the latter of which they had communication with the Esquimaux, whose persons, clothing, canoes, and implements are described with great accuracy. Mr. Ellis observes, that the approach to large islands or fields of ice is always announced by the change in the temperature from warm to cold, and generally by low fogs suspended over it. He also observes, that the refraction is so great, that it is not uncommon

* A Voyage to Hudson's Bay, by Henry Ellis.

to see the ice thrown above the horizon at least six degrees.

On the 2d August they doubled Cape Digges, passed Mansell's Islands, and on the 11th made the land on the west side of the *Welcome*, in latitude 64° N. From hence they proceeded to Marble Island, where they made some observations on the tides and currents; and finding the flood tide come down the coast from the northward, they had great hopes of a passage; but the season being advanced, it was resolved to bear up for Port Nelson, as being the most eligible place for passing the winter: they accordingly made sail for that place on the 17th August; but on the 26th the Dobbs grounded on the flats, near a place called *Five-fathom-hole*, about seven miles from Fort York. A beacon had been erected as a leading mark, which the Governor of the Hudson's Bay Company caused to be cut down, though he very well knew, says Mr. Ellis, who we were. This was not all; he ordered them on no account to come nearer the factory, without producing a proper authority from the government or the Hudson's Bay Company. The Dobbs however got off, and, regardless of the threats of the Governor, both ships proceeded up Hayes River, and moored in a creek about two miles above Fort York. The people immediately set to work in digging holes in the ground to bury their wine and beer, and in building log huts to protect them from the

severity of the cold, frost, and snow,—"troublesome enough," says Mr. Ellis, "but not seeming to merit the terrible reports given of these winters by some authors;" alluding no doubt to the exaggerated statements of Captain James.

By the 1st November they were all comfortably hutted; but on the 2d, the frost was so severe that they could not keep the ink from freezing at the fire;—the unburied bottled beer was frozen solid near the fire; and the cold increased to such a degree, that it was thought prudent to remove the whole of the seamen out of the ships into the log huts. It seems, however, that the severity of cold is seldom felt above four or five days in a month, and generally about the full and change of the moon; at which times, the wind is usually from the north-west, and very tempestuous; but at other times, though there is a hard frost, Mr. Ellis says it is pleasant enough; the winds being variable and moderate, and the weather favourable for shooting or catching animals in traps, chiefly rabbits and partridges, which they procured in vast quantities. By constant exercise, when the weather would admit of it, and by keeping good fires of wood, and when burnt by stopping up the chimney, they appear to have suffered very little from the effects of cold; and we hear of none of those wailings with which James's doleful narrative is filled, at a place too full five leagues farther to the southward on the same coast. Mr.

Ellis observes, that the difference was so great between the cold without and the heated huts within, that persons, on entering the latter, frequently fainted, and remained apparently lifeless for some time; that if a door or window was but opened, the cold air rushed in with great fury, and turned the vapour, inclosed within the hut, into a snow shower. The alternate freezing and thawing of the juices of the logs caused them to split with a noise little inferior to the report of a musket. Spirits of wine did not freeze into ice, but became of the consistence of oil. The different kinds of game, which they procured between November and April, kept easily in a frozen state for any length of time without the use of salt. When any part of the human body was frozen, it became hard and white like ice, but by rubbing the part with a warm hand it went off in a blister; if left alone the part mortified. Extreme cold appeared to have pretty nearly the same effect as extreme heat, and required nearly the same treatment: of the absolute degree of cold Mr. Ellis cannot speak, as they took out but one thermometer, which was broken before they reached the ice. It is noted, in manuscript, in the margin of the copy of Mr. Ellis's book from which this abstract is taken, "that the greatest degree of cold observed (by the writer) at Churchill was 45° below the cypher of Fahrenheit's scale." The effects of the cold are sufficiently remarkable—"If we touch iron," says Mr. Ellis,

" or any other smooth solid surface in the winter, our fingers are froze fast to it; if, in drinking a dram of brandy out of a glass, one's tongue or lips touch it, in pulling it away, the skin is left upon it. An odd instance of this sort happened to one of our people, who was carrying a bottle of spirits, from the house to his tent; for not having a cork to stop the bottle, he made use of his finger, which was soon froze fast, by which accident he lost a part of it to make a cure practicable. All solid bodies, as glass, iron, ice and such like, acquire a degree of cold so very intense, that they resist the effects even of a strong heat, and that too for a good while:"*—yet with all this the inhabitants, according to Mr. Ellis, are neither uncomfortable nor unhappy—nay, he asserts, that Europeans even, who have lived here for some years, prefer it to all other places; and that when they leave it and come home with their ships, they usually grow tired, in a few months, of a more moderate climate, and wish with impatience for the proper season, that may give them an opportunity of re-visiting these frozen regions.

It was the 2d June before the winter finally took leave of them, and enabled them to get the vessels ready for dropping down to the mouth of the river; and it was not till the 24th that they succeeded in passing the shoals; they then stood to

* A Voyage to Hudson's Bay, by Henry Ellis, p. 181.

the northward for the purpose of discovery. To the northward of Churchill they had a sea clear of ice. In coasting along the shore and among islands Mr. Ellis observes, that the needles of the compasses lost their magnetical qualities; "one seeming to act from this direction, and another under that, and yet they were not for any considerable space of time constant to any:" his speculations on this fact, which has been remarked among the islands of Hudson's Bay both before and since his time, do not appear to throw much light on this phenomenon, and are therefore omitted.

They proceeded to the northward as far 65° 5′ in the Welcome, where they found the flood tide coming from the northward. This direction of the tide, and their nearness to Wager Strait, concerning which there had been so warm a dispute between Mr. Dobbs and Captain Middleton, determined the two Captains of the Dobbs and California to enter upon an examination of it. The entrance of this inlet is formed by *Cape Montague* on the north, and *Cape Dobbs* on the south. About five leagues within it, the width is contracted to about five miles, where the tide rushes with so much impetuosity that Mr. Ellis says, it seems like a sluice; beyond this it again opens out, and forms several good harbours and safe anchoring ground. At one hundred and fifty miles from the entrance, the colour of the water was found to be perfectly bright, and its taste

very salt. At this place a fall or rapid extended across the strait, which, however, the boats passed without difficulty, and found the depth beyond it increase so much that they had no bottom with 140 fathoms of line. The water at the surface was fresh, but on sinking an empty bottle to the depth of thirty fathoms, it came up full of water as salt as that in the Atlantic. Soon after this the water suddenly shoaled, and it was discovered that the inlet terminated in two unnavigable rivers, one of which proceeded from a large lake lying to the south-westward.

Being disappointed in not finding a passage through Wager Strait, for so it was supposed to be, it was proposed that they should examine another opening to the northward, which appears to have been Captain Middleton's *frozen strait*, or entrance into what is now known as Repulse Bay. They had sufficient encouragement to make this attempt, as the farther they advanced to the northward along this coast, the more flattering were the prospects of a passage communicating with a great ocean, as the tides were always higher and the time of high water sooner than to the southward; and Mr. Ellis says, "the saltness and transparency of the water in the Welcome was such, that one might see the bottom at the depth of twelve or fourteen fathoms;" to which he adds, "the numbers of whales that were continually seen upon the coast,

and the repeated instances we had, that north-west winds made abundantly the highest tides."

A difference of opinion however prevailed between the commanders and among the officers, as to the propriety of proceeding to the examination of this bay, consistently with their instructions; and most of the party were evidently indisposed towards any further research, urging the advanced season of the year, though it was only the 7th August, and the winter seldom sets in till the beginning or middle of October. After this nothing was done nor even attempted; and a council being held, it was determined to bear up without further delay for England, which was accordingly put in execution; and on the 29th August they reached the western entrance of Hudson's Strait, with very pleasant warm weather, which lasted till the 3d September; and, after stopping some time at the Orkneys, arrived safely in Yarmouth roads on the 14th October, after an absence of one year, four months, and seventeen days.

"Thus," says Mr. Ellis, "ended a voyage of very great expectation, not only here, but throughout the greatest part of Europe, more especially the maritime countries, where the design, its nature, consequences, and their great importance were best understood. Thus, I say, ended this voyage—without success indeed, but not without effect; for though we did not discover a north-

west passage, yet were we so far from discovering the impossibility or even improbability of it, that, on the contrary, we returned with clearer and fuller proofs, founded on the only evidence that ought to take place in an inquiry of this nature,—plain facts and accurate experiments, that evidently shew such a passage there may be."*

SAMUEL HEARNE. 1769 *to* 1772.

The unsatisfactory result of the voyage of the Dobbs and California would appear to have thrown a damp on the ardour of northern discovery, which the parliamentary reward, liberal as it was, failed to revive; and for nearly thirty years no attempt whatever was made by sea, either on the part of government or of individuals. At length, however, the Hudson's Bay Company undertook to make discoveries to the northward by land, partly to look for a large river, on which was said to be the copper mine so often mentioned, and partly to obtain correct geographical information; and Mr. HEARNE was pitched upon to conduct this expedition.

He set out from the Fort Prince of Wales on the 6th November, 1769, crossed the Seal-River and travelled over the barren grounds; but the

* A Voyage to Hudson's Bay, by Henry Ellis, p. 298.

weather beginning to be excessively cold, all his provisions expended, and no supply to be had, the chief of the Indians who accompanied him wishing to return, and ultimately leaving him, he was obliged to retrace his steps, after reaching no farther than about the 64th degree of latitude, and arrived at the factory on the 11th December.

On the 23d February, 1770, he set out a second time, accompanied by three northern and two southern Indians. They continued to proceed slowly to the northward and westward, living on what the country afforded, which was sometimes most abundant and at others nothing at all—or, as Hearne says, "either all feasting or all famine; sometimes we had too much, seldom just enough, frequently too little, and often none at all. It will be only necessary to say, that we have fasted many times two whole days and nights, twice upwards of three days, and once near seven days, during which we tasted not a mouthful of any thing, except a few cranberries, water, scraps of old leather, and burnt bones."* Towards the end of July his guide intimated to him that it was too late that year to think of reaching the Copper Mine River, and proposed spending the winter among a tribe of Indians where they then were, between the 63d and 64th degrees of latitude;

* *Journey from Hudson's Bay to the Northern Ocean, by Samuel Hearne*, p. 33.

but on the 11th August, while making an observation for the latitude, a sudden gust of wind blew down the quadrant, "and as the ground where it stood was very stony, the bubbles, the sight vane and vernier, were entirely broke to pieces, which rendered the instrument useless. In consequence of this misfortune I resolved to return again to the fort, though we were then in the latitude of 63° 10′ north, and about 10° 40′ west longitude from Churchill River."* Accordingly, after many difficulties, and extreme hardships from the inclemency of the weather and from hunger, he arrived at Prince of Wales's Fort on the 25th November, after an absence of eight months and twenty-two days.

On the 7th December Mr. Hearne again set out for the third time to explore the northern parts of North America, and particularly to discover the situation of the copper mine. On the 1st July he reaches a place called *Congecathawhachaga*, which is not only remarkable on account of the length of the name, but as being the only spot on this long journey at which any observation was made for the latitude; and even here no particulars are given, but merely an assertion, that "during this time I had two observations, both by meridional and double altitudes, the mean of

* *Journey from Hudson's Bay to the Northern Ocean, by Samuel Hearne*, p. 106.

which determined the latitude of Congecathawhachaga to be 68° 46′ N., and its longitude was 24° 2′ W. from Prince of Wales's Fort, or 118° 15′ W. of the meridian of London."

On the 13th of the same month he reached the Copper Mine River, and on the 15th commenced his survey of it. The Indians that accompanied him live in constant hostility with the Esquimaux inhabiting the lower part of the river, and now prepared to attack them in their tents, to which they approached on the 17th about one o'clock in the morning, "when finding all the Esquimaux quiet in their tents, they rushed forth from their ambuscade and fell on the poor unsuspecting creatures, unperceived till close at the very eves of their tents, when they soon began the bloody massacre, while I stood neuter in the rear." It seems that the little horde consisted of about twenty persons, men, women, and children, who were all put to death in the most barbarous and inhuman manner.

Another small tribe of Esquimaux escaped the brutal fury of the Indians: but "they threw all the tents and tent-poles into the river, destroyed a vast quantity of dried salmon, musk-oxen flesh, and other provisions; broke all the stone kettles; and in fact did all the mischief they possibly could to distress the poor creatures they could not murder, and who were standing as the woeful spectators of their great or perhaps irreparable loss."

After this piece of wantonness "we sat down," Hearne says, "and made a good meal of fresh salmon." He adds, "It was then about five o'clock in the morning of the 17th, the sea being in sight from the north-west by west to the north-east, about eight miles distant; I therefore set instantly about commencing my survey, and pursued it to the mouth of the river, which I found all the way so full of shoals and falls that it was not navigable for a boat, and that it emptied itself into the sea over a ridge or bar."* The tide, he says, was then out; but he judged from the marks on the edge of the ice that it flowed about twelve or fourteen feet; that, the tide being out, the water in the river was perfectly fresh; but, he continues, "I am certain of its being the sea, or some branch of it, by the quantity of whalebone and seal's skins which the Esquimaux had at their tents, and also by the number of seals which I saw on the ice." He says moreover, that at the mouth of the river "the sea is full of islands and shoals" as far as he could see with the assistance of a good pocket telescope.

It has been doubted whether Hearne ever reached the sea-coast, on the ground that the water in the mouth of the river being *perfectly fresh*, when the tide was out, is inconsistent with the flood rising

* *Journey from Hudson's Bay to the Northern Ocean, by Samuel Hearne*, p. 162.

fourteen feet. It might certainly have been expected that, after so long and hazardous a journey, Mr. Hearne would have taken every possible care to have ascertained in the most unequivocal manner whether he really had reached the northern shore of North America, and stood on the borders of the hyperborean sea. If the tide was *out* in the morning of the 17th, it must have been *in* on the middle part of the same day; and as he never quitted the margin of the river, or the shore of the supposed sea, till the morning of the 18th, and consequently was there during the flowing and ebbing of two distinct tides, it is certainly very unsatisfactory to state merely that he judged its rise to be fourteen feet by some marks that he perceived on the ice; nor is it easy to comprehend how the water at the mouth of a river, into which the tide flows and rises fourteen feet, could have been *perfectly fresh.*

Equally unsatisfactory is his statement as to the latitude of the mouth of the Copper Mine River. He says that a thick fog and drizzling rain came on, and that "finding that neither the river nor the sea were likely to be of any use, I did not think it worth while to wait for fair weather to determine the latitude exactly by an observation." What then, it might be asked, did he go for? He tells us, and it appears by his instructions, that he was selected for the expedition because he knew

how to take an observation for the latitude; and yet, during his long and interesting journey of twelve or thirteen hundred miles and as many back again, he takes but *one* solitary observation to ascertain the latitude; which is the more unaccountable as, by a remark of his own, he seldom could have wanted opportunities to determine this most essential point, without which the true geography of this part of the continent may still be said to remain in doubt. His remark is, that "in those high latitudes, and at this season of the year, the sun is always at a good height above the horizon, so that he had not only day-light but sunshine the whole night." Still, however, he tells us that the latitude of the mouth of the river may be depended on, though he does not mention in the text what that latitude was; it is to be collected only from the chart, in which it would appear to be about 73° 30′. Now comparing his journey after leaving Congecathawhachaga, where his single observation was made and which gave him 68° 46′, and calculating by the courses and distances the difference of latitude between that place and the mouth of the river, that difference would not appear to exceed *three* degrees; so that the latitude, which Mr. Hearne says "may be depended on," and which on the chart is 73° 30′, ought rather to be taken at 71° 46′. Doctor Douglas, into whose hands the manuscript journal was placed long before its publication, states the

latitude of the river's mouth to be 72°; but the late Mr. Dalrymple, after carefully comparing Hearne's distances and the direction in which he travelled, with Canadian and other authorities, and after him Mr. Arrowsmith and other geographers, have agreed to cut down Mr. Hearne's latitude to that of about 69°, which falls in pretty nearly with that of the supposed sea-coast visited by Mackenzie afterwards farther to the westward.

The correctness of Mr. Hearne's narrative may be questioned in many respects. For instance, the sun could not "always be a good height above the horizon" in the latitude 69°, especially when he was there, for his declination on the 18th July, being about 20° N., he could have been only, in the middle of the night of that day, just *in* the horizon. In that part of his journal where the expression occurs, and which is quoted by Doctor Douglas, there is not a word of this "sunshine all night." The journey of Mr. Hearne proved however the practicability of reaching the northern shore, and it is much to be regretted that this journey has not been followed up by the Hudson's Bay Company.

CONSTATNINE JOHN PHIPPS. 1773.

The Honourable Daines Barrington having presented to the Royal Society a series of papers on

the practicability of approaching the north pole, the President and Council of that Society came to the resolution of applying to the Earl of Sandwich, then first Lord of the Admiralty, to obtain his Majesty's sanction for an expedition to be fitted out for the purpose of trying how far navigation might be practicable towards the north pole. This expedition his Majesty was pleased to direct should be immediately undertaken, "with every encouragement that could countenance such an enterprize, and every assistance that could contribute to its success." Two ships, the *Racehorse* and the *Carcass*, bombs, as being the strongest, were therefore fixed upon as the most proper for the purpose; the former having on board a complement of ninety men, and the latter eighty, with an additional number of officers. The command of the expedition was given to the Hon. Captain CONSTANTINE JOHN PHIPPS, (afterwards Lord Mulgrave,) who embarked in the Racehorse, and Captain SKEFFINGTON LUTWIDGE was appointed to the command of the Carcass. Two masters of Greenland ships were employed as pilots. Mr. Israel Lyons was recommended by the Board of Longitude as astronomer; and instruments of various kinds, of the best description at that time in use, were sent on this interesting voyage.

The two ships sailed from the Nore on the 10th June, 1773. On the 27th they had an observation

of the sun at midnight, which gave the latitude to be 74° 26′; and in the evening of that day reached the latitude of the south part of Spitzbergen with a fair wind, without an increase of cold, and without any appearance of ice or sight of land. A piece of drift-wood, which was fir, was picked up, and not worm-eaten. On the 29th they stood in with the land, which was formed "by high, barren, black rocks, without the least marks of vegetation; in many places bare and pointed, in other parts covered with snow, appearing even above the clouds; the vallies between the high cliffs were filled with snow or ice. This prospect would have suggested the idea of perpetual winter, had not the mildness of the weather, the smooth water, bright sunshine, and constant daylight, given a cheerfulness and novelty to the whole of this striking and romantic scene."* On this day the latitude observed was 77° 59′ 11″.

A mountain was measured which was fifteen hundred and three yards in height. The weather along the coast continued to be moderate and fine. At midnight the latitude was 78° 23′ 46″; the dip of the magnetic needle 80° 45′. On the 4th the latitude of Magdalena Hoek was ascertained to be 79° 34′; the same as Fotherby observed it to be in 1614. On the 5th they fell in with the main body of the ice, along which they stood to as-

* A Voyage towards the North Pole, p. 31.

certain whether it joined to the land of Spitzbergen, or was so detached as to afford an opportunity of passing to the eastward. But the pilots and officers thought it impracticable to proceed in that direction, and augured that they would probably soon be beset where they were, as this was about the spot where most of the old discoverers had been stopped. With great difficulty they worked their way through the more loose parts of the ice towards the north-west. A heavy swell and thick weather caused them to tack and to stand towards Hakluyt's Headland.

On the morning of the 9th the ice was found to be quite fast to the west, being then in longitude 2° 2′ E. by their reckoning, which Captain Phipps observes was the farthest to the westward of Spitzbergen they ever got on the voyage. In the evening of the same day the latitude was 80° 36. Having run along the edge of the ice from east to west above ten degrees, "I now," says Captain Phipps, "began to conceive that the ice was one compact impenetrable body." He now stood over to the eastward, and on the 13th came to anchor in Vogelsang; a good roadstead, near a remarkable point called Cloven Cliff, which is "a bare rock, so called from the top of it resembling a cloven hoof, which appearance it has always worn, having been named by some of the first Dutch navigators who frequented these seas. This rock, being entirely detached from the other mountains, and joined to

the rest of the island by a low narrow isthmus, preserves in all situations the same form, and, being nearly perpendicular, it is never disguised by snow:"* its latitude is 79° 53′ N., longitude 9° 59′ 30″ E.; the variation of the compass was 20° 38′ W. dip 82° 7′. Here they ascertained the going of the pendulum, which had been adjusted to vibrate seconds in London. The thermometer differed very little at noon and at midnight, being 58½° at the former and 51° at the latter. On the 16th, the weather being fine and clear, the thermometer in the shade rose, by exposure to the sun for a few minutes, from 49° to 89½°, and remained so for some time, till a small breeze springing up made it fall 10° almost instantly.

Again on the 18th the ships stood to the eastward, along the edge of the ice; but were for a third time stopped about the same place, by finding the ice locked in with the land, without any passage either to the northward or the eastward. There were small openings, however, into one of which they proceeded as far as 80° 34′. For the fourth time Captain Phipps made an attempt to get to the eastward; passed Moffen Island, and in working among loose ice proceeded as far to the northward, on the 27th, as 80° 48′ by the reckoning, when they were stopped by the main body of the ice, which extended in a line

* A Voyage towards the North Pole, p. 44.

nearly east and west. By observation at midnight the latitude was 80° 37′, and their longitude the following day, when in sight of the *Seven Islands*, was 15° 16′ 45″ E.

Some of the officers landed on a low flat island in the mouth of Waygat Strait, on which they found several large fir trees lying on the shore, sixteen or eighteen feet above the level of the sea; some of them, seventy feet in length, had been torn up by the roots, others had been cut down with an axe and notched for twelve-feet lengths; this timber was no ways decayed, or the strokes of the hatchet in the least effaced. The beach was formed of old timber, sand, and whale-bones. The middle of this island was covered with moss, scurvy grass, sorrel, and a few ranunculuses then in flower. Two rein-deer were feeding on the moss, one of which they killed, and found it fat and of high flavour. On the return of the officers they wounded a sea-horse, which dived immediately and brought up with it a number of others. They all joined in an attack upon the boat, wrested an oar from one of the men, and were with difficulty prevented from staving or oversetting the boat.

On the 30th July the weather was exceedingly fine and mild and unusually clear. "The scene," says Captain Phipps, "was beautiful and picturesque; the two ships becalmed in a large bay, with three apparent openings between the islands

that formed it, but every where surrounded with ice as far as we could see, with some streams of water; not a breath of air; the water perfectly smooth; the ice covered with snow, low and even, except a few broken pieces near the edges; the pools of water in the middle of the pieces were frozen over with young ice."*

The ships were now beset in the ice; and the pilots, being much farther than they had ever been, and the season advancing, seemed to be alarmed at their situation. On the 1st August the ice began to press in fast; there was not the smallest opening. The ice, which had hitherto been flat and almost level with the water's edge, was now in many places forced higher than the main yard by the pieces squeezing together. The latitude was 80° 37′, longitude 19° 0′ 15″ E. On the 3d the men began to cut a passage through the ice, and work through the small openings to the westward; the ice was deep, having sawed sometimes through pieces twelve feet thick; they laboured a whole day without any success. The ships drove with the ice and came into fourteen fathom. After some deliberation, Captain Phipps proposed to leave the ships and betake themselves to the boats, which were hoisted out. This measure he conceived it necessary to take without further delay, as the stay of the Dutch ships to

* A Voyage towards the North Pole, p. 60.

the northward was very doubtful. On the 7th they pushed away the launch to the westward, and at the same time kept all sail on the ships to force them through the ice; in this way they worked to the westward, when on the 10th, the wind, springing up to the N.N.E., forced the ships through a great deal of very heavy ice and got them into open water; and the following day they reached Amsterdam Island, the westernmost point of which is Hakluyt's Headland.

They anchored the same day in Fair Haven, where is one of the most remarkable ice-bergs in Spitzbergen. "Ice-bergs," observes Captain Phipps, "are large bodies of ice filling the valleys between the huge mountains; the face towards the sea is nearly perpendicular, and of a very lively light green colour. That represented in the engraving was about three hundred feet high, with a cascade of water issuing out of it. The black mountains, white snow, and beautiful colour of the ice, make a very romantic and uncommon picture. Large pieces frequently break off from the icebergs and fall with great noise into the water; we observed one piece which had floated out into the bay and grounded in twenty-four fathoms; it was fifty feet high above the surface of the water, and of the same beautiful colour as the ice-berg."*

On the 19th they weighed anchor and again

* A Voyage towards the North Pole, p. 70.

stood out to sea; but as the season was now so far advanced, and as fogs and gales of wind might constantly be expected, Captain Phipps determined to bear up for England, and on the 25th September arrived at the Nore. Captain Phipps seems to think that "the summer was uncommonly favourable for his purpose," because it "afforded him the fullest opportunity of ascertaining repeatedly the situation of that wall of ice, extending for more than twenty degrees between the latitudes of eighty and eighty-one, without the smallest appearance of any opening." There is reason to believe, however, that few years occur in which there are not many openings in the wall of ice which usually stretches between the eastern coast of Greenland and the northern-most parts of Spitzbergen, and consequently the summer in which Captain Phipps made the attempt to get to the northward was peculiarly unfavourable.

JAMES COOK AND CHARLES CLERKE.
1776 *to* 1779.

The hopes of opening a navigable communication between the Pacific and Atlantic oceans, by a northerly course, were not abandoned by the failure of Lord Mulgrave; another voyage was ordered to be undertaken for that purpose, and Captain JAMES COOK, who had twice circumnavi-

gated the globe, was appointed to command it. On this occasion the plan of discovery which had hitherto been followed was reversed, and instead of attempting to pass from the Atlantic to the Pacific, it was now intended to try it from the latter into the former. The two ships fitted out for this purpose were the *Resolution* and the *Discovery;* the former of which was under the immediate command of Captain Cook, the latter of Captain Clerke. It has been mentioned, that by the Act of 18 Geo. II. a reward of £20,000 was held out to ships belonging to any of his Majesty's subjects which should make the passage; but it excluded his Majesty's own ships; the reward was moreover confined to such ships as should discover a passage through Hudson's Bay. This Act was therefore, on the present occasion, amended, and so framed as to include his Majesty's ships, and to appropriate the reward for the discovery of "any northern passage" for vessels by sea between the Atlantic and Pacific Oceans; and it also awards the sum of five thousand pounds to any ship that shall approach to within one degree of the North Pole.*

On the 12th July, 1776, the Resolution sailed from Plymouth Sound, leaving instructions for the Discovery to join her at the Cape of Good Hope; and after various discoveries in the southern hemisphere, the Pacific, and the two coasts of Asia and

* 16 Geo. III. chap. 6.

America, with which all Europe is well acquainted, the two ships entered Behring's Strait on 9th August, 1779, and anchored near a point of land to which Captain Cook gave the name of *Cape Prince of Wales*, which he afterwards ascertained to be the western extremity of the whole continent of America. It is situated in latitude 65° 46′ N. and longitude 191° 45′ E. Some elevations like stages, and others like huts, were seen on this part of the coast, and they thought also that some people were visible. From hence they stood over to the westward and entered a bay on the east coast of Asia, at the head of which was a village and some people. On landing they were found to consist of about thirty or forty men, each armed with a spontoon, a bow and arrows, drawn up on a rising ground. As the people of the ships drew near, three of the natives came down to the shore, took off their caps and made low bows. An exchange of presents took place; those received by Captain Cook were two fox-skins and a couple of seahorse-teeth; they appeared, however, to be fearful and cautious, and preserved the attitude of being ready to make use of their spears. They parted with their arrows in exchange for trifling articles, but nothing could induce them to part with a spear or a bow. All their weapons were made with great ingenuity, and their quivers in particular are represented as extremely beautiful, being made of red leather covered with neat em-

broidery and other ornaments. They differed in their persons and features entirely from the natives of north-west America, the latter being low of stature, with round faces and high cheek-bones; whereas the Tchutski had long visages and were stout and well made; they had their ears bored and some had glass beads hanging from them, but no lip ornaments like the Americans. They had numerous dogs, probably used to draw their sledges, of which several appeared in one of the huts; but Captain Cook thought that they might also constitute a part of their food, as several were observed lying dead which had been killed that morning.

From this bay the ships stood over to the north-east, and again fell in with the west coast of America, the distance in the narrowest part being only about fourteen leagues. Another cape was observed to the northward of Cape Prince of Wales, lying in latitude 67° 45′ and longitude 194° 51′; the whole coast free from snow, but apparently destitute of wood. To this cape Captain Cook gave the name of *Point Mulgrave.*

On the 17th August, in latitude 70° 41′, they fell in with the ice, extending from E. by N. to W. by S. and quite impenetrable, being as compact as a wall and at least ten or twelve feet high, and to the northward apparently much higher. The weather clearing up, the extreme point of the eastern land, or America, was observed to form a

point, which was much encumbered with ice; for which reason it obtained the name of *Icy Cape*. Its latitude was 70° 29′, longitude 198° 20′.

As the ice appeared to be drifting down towards the ships, and might probably have caught them between it and the American shore, they stood back to the southward into clear water, and afterwards to the northward, finding the ice less compact and covered with whole herds of the sea-horse, many of which they took and found to be good meat. The weather coming on foggy, it was thought prudent to stand to the southward; and on the 21st, when in latitude 69° 32′, the main ice was observed at no great distance from them, so that it now covered a part of the sea which but a few days before had been clear; and it extended farther to the south than where they had first fallen in with it. But, Captain Cook observes, he did not suppose any part of this ice to be fixed; on the contrary, he considered the whole as a moveable mass.

Captain Cook stood in for the American coast, which extended from S. W. to E., the nearest part being four or five leagues distant. The southern extreme he named *Cape Lisburne*, whose latitude was 68° 5′, longitude 194° 42′. Finding he could not get to the north, while near the coast, on account of the ice, he stood out to a distance from it. The water deepened, as he stood westward, to twenty-eight fathoms, which was the most they

had. On the 26th they again fell in with the main body of the ice, appearing to be thick and compact, and to extend from N.W. to E. by N.; the latitude then 69° 36′, longitude 184°.

On the 27th, being close to the edge of the ice, Captain Cook went in a boat to examine it. He found it to consist of loose pieces, so close together as scarcely to admit the boat between them; it was all pure transparent ice, except the upper surface, which was a little porous; it appeared to be composed of frozen snow, and to have been all formed at sea. The pieces were from forty or fifty yards in extent to four or five, and the larger pieces appeared to reach thirty feet or more under the surface of the water. He considered it improbable that so much ice could have been the product of the preceding winter; and equally improbable that the little which remained of the summer could destroy the tenth part of what then subsisted of the mass; he thinks indeed that the sun contributes very little to the destruction of such immense masses; that it is the wind, or rather the waves raised by the wind, that brings down the bulk of these huge masses, by grinding one piece against another, and washing away those parts that lie exposed to the surge of the sea. Davis was of the same opinion nearly two hundred years before.

On the 29th the ships made the land of the Asiatic continent, which, like the opposite coast

of America, was low land next the sea, with elevated land farther back. It was destitute of wood, and without snow. To a steep and rocky point Captain Cook gave the name of *Cape North*; its latitude 68° 56′, longitude 180° 51′; no land appearing to the northward of this, it it was concluded that the coast here began to trend to the westward. "The season," says Captain Cook, "was now so far advanced, and the time when the frost is expected to set in so near at hand, that I did not think it consistent with prudence, to make any further attempts to find a passage into the Atlantic this year, in any direction, so little was the prospect of succeeding." Accordingly, on the 30th August, he stood to the southward, coasting the land of Asia from the *Cape Serdze Kamen* of Muller, so called from a heart-shaped rock upon it, round East Cape, passed the mouth of the bay of St. Lawrence, down to Tschukotskoi Noss, from thence to Norton Sound on the American coast, and finally to the Sandwich Islands, where this celebrated navigator lost his life.*

Captain Clerke was now become Commanding Officer, and Lieutenant Gore appointed Commander of the Discovery. On the 15th March, 1779, they left the Sandwich Islands, and stood to the northward, by the way of Kamtschatka, to follow up the discovery of a passage into the

* Cook's last Voyage into the Pacific, &c. vol. ii.

Atlantic. On the 3d July they came in sight of Tschukotskoi Noss, and on the 5th saw East Cape, covered with snow, and the beach surrounded with ice. On the same evening, at ten o'clock, they saw, at the same moment, the remarkable peaked hill, near *Cape Prince of Wales*, on the coast of America, and the *East Cape* of Asia, with the two connecting islands of *Saint Diomede* between them. On the following day they fell in with an extensive body of ice, from which they seem to have anticipated an unsuccessful issue of the expedition. It presented a solid compact surface, and appeared to adhere to the coast of America.

On the 8th July the latitude was 69° 21′, longitude 192° 42′ W. They were then close to the ice, the weather exceedingly cold, with much snow and sleet; Fahrenheit's thermometer in the night 28°, and at noon 30°. Having stood near forty leagues to the westward along the edge of the ice, without seeing any opening, or a clear sea to the northward beyond it, Captain Clerke resolved to return to the southward and to pass the time in examining the Bay of St. Lawrence, till the season should be further advanced. They found so much ice, however, to the southward, and the sea now appeared so free from it to the northward, that they immediately returned towards that quarter; but on the 13th found themselves close in with a solid field of ice, to which no limits could be seen from the mast head;

the latitude then being 69° 37′, and the position of the ships nearly in the mid channel, between two continents; the ice extending from E. N. E. to W. S. W. They proceeded along the edge towards the coast of America, and, on the 18th, were in latitude 70° 26′, longitude 194° 54′. The following day they found themselves so completely embayed in the ice as to have but one opening to the southward, through which they directed their course. This was the farthest point to which they proceeded, being in latitude 70° 33′, which is five leagues short of the point to which Captain Cook had proceeded the former year. On the 21st they got sight of the American coast at the distance of eight or ten leagues, and hauled in for it; but were again stopped by the ice, and obliged to bear away to the westward, along the edge of it. "Thus," observes the writer of the voyage (Captain King), "a connected, solid field of ice rendering every effort we could make to a nearer approach to the land fruitless, and joining, as we judged, to it, we took a last farewell of a north-east passage to England."

After this the ships stood over to the eastward, and on the 27th came in sight of the Asiatic continent, beyond large fields and masses of ice, in which the Discovery had been beset and so seriously damaged, as to require at least three weeks repair, for which purpose it would be necessary to go into some port. As there was thus little or no prospect of advancing to the

northward, and both continents were obstructed by a sea blocked up with ice, it was deemed fruitless by both Captains, with respect to the design of the voyage, to make any further attempts toward a passage; and they determined, therefore, to lose no more time in what Captain Clerke concluded to be an unattainable object, but to sail for Awatska Bay, to repair the damages.

"I will not," says Captain King, "endeavour to conceal the joy that brightened the countenance of every individual, as soon as Captain Clerke's resolutions were made known. We were all heartily sick of a navigation full of danger, and in which the utmost perseverance had not been repaid with the smallest probability of success. We therefore turned our faces toward home, after an absence of three years, with a delight and satisfaction, which, notwithstanding the tedious voyage we had still to make, and the immense distance we had to run, were as freely entertained, and perhaps as fully enjoyed, as if we had been already in sight of the Land's-end."*

RICHARD PICKERSGILL. 1776.

To give facility to the success of Captain Cook's expedition, in the event of his reaching

* Cook's last Voyage, vol. iii.

Baffin's Bay, Lieutenant PICKERSGILL was directed to proceed to Davis's Strait in his Majesty's armed brig the *Lion*, for the protection of the British whale fishers, and, that being accomplished, to continue up the strait into Baffin's Bay, and explore the coasts thereof, taking care to leave it in time to secure his return to England in the fall of the year; with injunctions to employ the Master, Mr. Lane, in surveying, making charts, and taking views of the several bays, harbours, &c. and in making such notations thereon as might be useful to geography and navigation.* Pickersgill was not instructed to attempt the passage; the object of sending him into Baffin's Bay being merely to obtain such information as might be useful the following year to the vessel which was intended to be sent out to look for Captain Cook, about the time he might be expected to approach the eastern side of America in the event of success.

The Lion left Deptford on the 25th May, 1776; struck soundings on a bank at 320 to 330 fathoms, on the 29th June, in latitude 57° N., longitude 24° 24′ W. which he supposed might be the remains of Buss Island seen by one of Sir Martin Frobisher's fleet; and, on the 7th July, saw Cape Farewell, near which, on the following day, he was set fast in a field of ice, " the land at the same time forming one of the most romantic scenes that can

* MS. Instructions, 14th May, 1776.

be described, being very high and rugged, presenting to the eye mountainous rocks and spires of almost every shape, intermixed with patches of snow, which contrasted finely with the deep blue of the mountains, affording the most pleasing sensations, and at the same time exhibiting either grandeur or horror as the sun shone forth or as it was cloudy."* Among the field-ice were several lofty islands, on one of which was much earthy matter many feet deep, and pieces of rock several hundred pounds weight each, with gravelly streams of fresh water pouring down its sides. The whole mass was drifting to the southward. The sea being perfectly smooth among the ice afforded them a good opportunity of making observations for the variation and inclination of the magnetic needle, the former of which was found to be 41° 31′ W., and the latter 76° 30′; the latitude at the same time being 60° 1′ N., and longitude, by observation of the sun and moon, 46° 36′ W.: and from these observations and his distance from Cape Farewell, he makes that promontory to lie in latitude 59° 32′ N. longitude 44° 10′ West of Greenwich.

Mr. Pickersgill, in proceeding to the northward, appears to have kept as close to the shore as the ice and the rocks would permit; and on the 13th was "regaled," as he expresses himself, "with the astonishing sight of the famous Greenland ice-

* Lieutenant Pickersgill's M.S. Journal.

glance; it is a prodigious high field of solid ice, frozen across the supposed Frobisher's Strait, and is as high as the mountains, having the most romantic appearance that can be imagined, though it does not shine so bright as I should have supposed from the description which has been given of it, nor could I see those amazing arches, said to be forty feet in height, through which the water rushes, bringing back with the ebb tide vast quantities of ice from the inland countries with a crashing noise resembling thunder; at the same time it is very possible, for the nearest distance we were from it was at least four leagues."*

Still running northwards along the shore, among rocks, islands, sand-banks and ice, the Lieutenant anchored the Lion in a place which he called *Musquito Cove*, from the swarms of this insect, bred, as he supposes, in the pools of snow water among the rocks. The latitude of this place was found to be 64° 56′ 20″ N., longitude 51° 53′ 30″ W., dip of the needle 81° 22′ 30″, and variation 50° 30′ W. Here he had some communication with the natives, who are described as well-behaved, diffident and honest.

On leaving this place Lieutenant Pickersgill continued standing as close along the shore as he could get for rocks and ice, and one day caught thirty-six fine hollybutts, from one hundred to

* M.S. Journal.

three hundred pounds each. The sea was now clear of ice until he came opposite to Davis's *Cape of God's Mercy*, when an immense field of ice appeared in sight, along which he continued to sail for upwards of fifty miles. On the 3d August, being then in latitude 65° 37′, he first began to perceive his error in the navigation of Davis's Strait: "This day," he says, "has wafted us faster than we have ever gone since we entered these calm and foggy straits, for, upon an average, we have gone no more northerly than twelve miles a day since we have entered them. I now see the reason of our slow progress, which has been the keeping too near the land; therefore, as I design to discover *sea* and not *land*, I shall direct my way *mid-channel*, as near as my poor simple judgment will direct me, hoping for God's blessing, with my own endeavours."* Accordingly, he made a distance of seventy-seven miles that day, and reached the latitude of 66° 53′,—but, notwithstanding this favourable commencement of the new plan which he was determined to adopt, the very next day all his resolution seems to have forsaken him, and we find him thus expressing himself. "At twelve, having passed a number of the highest ice-islands I ever saw, and meeting with many more, bigger and bigger, and every hour visibly increasing their number, with a very heavy sea from the southward and a hard gale, the nights growing

* M.S. Journal.

dark very fast, and the season far spent, a number of our men sick, a putrid fever raging in the vessel, and numbers complaining for want of clothing and with pains in their limbs, which seems to be in this country a general complaint,—the vessel very wet and single-bottomed, without being provided for wintering if we had been caught with the ice; in this situation, I thought it necessary to return, &c."* He stood on, however, as far as 68° 10′, then bore up for the southward; but, with an unaccountable perversity, still continued to creep along the shore, among the rocks, and islands, and fields of ice, and did not reach Cape Farewell till the 24th August. On the 4th September he ran into Porcupine harbour, on the coast of Labrador. Here he remained till the 27th, and on the 29th his journal breaks off thus—"Being now taken ill, which illness continued for almost all the passage, and as nothing material occurred during it, I hope their Lordships will excuse the short remainder until I give my general thoughts upon the voyage and the hopes of a passage." It does not appear, however, that their Lordships gave him any further trouble on either subject, but superseded him in the command of the Lion, not deeming him a proper person to be sent out on a similar voyage the following year.

* M.S. Journal.

WALTER YOUNG. 1777.

The *Lion* armed brig being again fitted out, under her new Commander, Lieutenant WALTER YOUNG, sailed from the Nore on the 23d March, 1777, and made Cape Farewell on the 3d June; and for several days had stormy weather, with much snow and hail, the ship working all the while among fields of packed ice, till, on the 18th May, she stood into the harbour of Lichtenfels. On the 24th she again weighed, and made sail to the northward, among much ice, and the weather so bad, that on the 2d June the ship's sails, ropes and rigging were one mass of ice. On the 5th, the sea rose very high, and made a fair breach over the main deck of the Lion, which froze instantly, and the decks became covered with a solid body of ice, and the rigging hung with icicles: at this time the Island of Disco was in sight. Here the ice seemed to divide into two immense fields, leaving an open channel in the middle, of eight or ten miles in width, down which channel were seen floating a number of ice-islands or bergs.

On the 28th June, in latitude 72° 42′, the *Woman's Islands* were in sight, and to the northward, the eastern ice appeared to approach the western, till the channel became so narrow that Lieutenant Young thought it prudent to tack and stand away to the southward. No soundings with 100 fathoms of line. The floating islands of ice

were very large and numerous, and much snow fell, with the thermometer at 30° to 32°. On the 10th it fell calm, the thermometer rose to 38° and 39°, and several fishing ships were in sight about latitude 71° 16′. The weather was now very fine, and the thermometer at 40° to 43°, and twenty sail of fishing vessels plying about; but a chain of large islands stretched across from the shore to the western ice, not more than a quarter of a mile asunder. The fine moderate weather, with the thermometer frequently up to 44° and 45°, and once to 49°, continued till the end of June, at which time we find the Lion as far to the southward as 63° 30′, and on the 4th July fairly out of the strait and to the westward of Cape Farewell, without any reason whatever being assigned for not proceeding to the northward, excepting the multitude of ice-islands which are repeatedly mentioned in the remarks of each day. Indeed the whole journal is as meagre as if it had been the record of the most ordinary voyage. On the 26th August he arrived at the Nore.* By his instructions, he was directed to make the best of his way into Baffin's Bay, and use his best endeavours to explore the western shores thereof, to examine if there be any considerable rivers or inlets affording the probability of a passage into the Pacific, and, if so, to attempt such a passage:†

* Lieutenant Young's M.S. Journal.

† M.S. Instructions.

but it would appear from his journal, that no regard whatever was paid to those instructions, and no attempts made to push into Baffin's Bay.

One circumstance of this voyage is worthy to be remarked for the contrast it affords with that of Pickersgill; by avoiding the shoals and islands near the western coast of Greenland, Young reached the latitude of 72° 42′ N. so early as the 8th June; whereas Pickersgill got only to 68° 10′ so late as the 5th August.

"It was natural to hope," says Dr. Douglas, "that something would have been done in one or other, or in both these voyages of the Lion, that might have opened our views with regard to the practicability of a passage from this side of America. But, unfortunately, the execution did not answer the expectations conceived. Pickersgill, who had acquired professional experience when acting under Captain Cook, justly merited the censure he received, for improper behaviour when entrusted with command in Davis's Strait; and the talents of Young, as it afterwards appeared, were more adapted to contribute to the glory of a victory,* as commander of a line of battle ship, than to add to geographical discoveries, by encountering mountains of ice, and exploring unknown coasts."†

* He died in the West Indies, when Captain of the Sandwich, bearing the flag of Sir George Rodney, in May, 1781.

† Introduction to Cook's last Voyage, p. 40.

CAPTAIN *(now Admiral)* LOWENORN, LIEUTENANT EGEDE AND LIEUTENANT ROTHÉ.

1786 *and* 1787.

The King of Denmark, at the recommendation of Bishop Egede, (son of the missionary, Hans Egede, who had taken him, when a child, into Greenland,) fitted out an expedition in the year 1786, for the purpose of re-discovering the eastern coast of Greenland, the command of which was given to CAPTAIN LOWENORN. The Bishop was persuaded that the long lost colony on this coast would be found to exist, or to have existed, in about the same parallel of latitude with the central part of the western coast of Iceland; that the distance between them was only about a hundred and eighty miles; and that midway the two coasts, or at least the summits of the mountains, are visible at the same time; that this coast of Greenland (which is supposed to be the part anciently inhabited by the Danes) would be found to extend to the distance of three hundred miles to the south-west, or south-south-west of Herjolfsnes, and to continue in that direction as far as Cape Farewell. These opinions, however, of the Bishop, have since been attempted to be set aside in a treatise of Mr. Eggers, who has endeavoured to prove that the part of Greenland anciently discovered, and by some supposed to be lost, is in fact the district

now called *Julianshaab*, which is at this moment inhabited by the Danes; and that this part has received the name of *East Greenland*, only because it happens to be situated a little to the east of that part which is commonly called the western coast.

The Danish government, however, was of a different opinion. The only question with it was, whether Frobisher had actually passed through a strait which, crossing from the eastern to the western coast, cut off and insulated a large portion of Greenland; and Mr. Lowenorn, before his departure, wrote a memoir to prove the fallacy of such a supposition, which in fact had been proved long before by the old English navigators.

Bishop Egede was of opinion that the most favourable season for commencing this voyage would be in the beginning of the spring, before the masses of ice should come down from the north and fix themselves to the coast; but Captain Lowenorn preferred making the attempt to reach the coast in the middle of summer, or even later, and to depart from the west coast of Iceland for that purpose, as the ice would then have floated down farther to the south and have left the east coast of Greenland open. The ship *Greo Ernst Scheinmelmann* of 246 tons burden, usually employed on the whale fishery, was engaged by government for this expedition. There was also attached to her a small vessel of 60 tons, which was placed under

the command of LIEUTENANT EGEDE, the son of the Bishop. These vessels were to pass the winter in Iceland, in order to resume their research the following summer, in case they should not succeed the first year. Mr. Lowenorn was ordered at the same time to examine carefully the geographical situation of the Shetland Isles, and to survey the coasts of Iceland, in order to improve the hydrography of that island. He was also to survey and ascertain the situation of a small volcanic island which had appeared in the year 1783, but which, according to the reports of several navigators, had disappeared the following year.

The two vessels set sail from Copenhagen on the 2d May, 1786, and arrived at Iceland on the 16th of the same month. They made some observations on the variation of the compass, which are not much to be relied on, as, from the number of volcanoes in almost every part of the island, which they say contain magnetic matter, the needle is so much affected by them as to vary many degrees in the shortest distances. Thus Olafsen has observed that, on the summit of Snœfell Jokul, the compass was so disorderly that it pointed in all directions.

Mr. Lowenorn was unable to obtain in Iceland any correct information respecting Old Greenland; nor could he ascertain the fact, that the coasts of Iceland and Greenland might be seen at the same

time. On the 20th June the two ships left Scolmensham, and on the 29th a phenomenon was observed during the day-time which they concluded to be the aurora borealis. The atmosphere was clouded and of an extraordinary whiteness; the sun was surrounded by a circle of faint light; towards the N.W. the air was less cloudy; and from the horizon streaks of light columns and luminous points shot up resembling the aurora borealis, darting and changing their shapes in the same manner as this meteor. The same phenomenon appeared again on the following day, but more faintly. If it was the aurora borealis, it is probably the first time it has been observed by daylight, and when the sun was above the horizon. On the 30th June, they perceived the Snœfell Jokul in the east, at the distance of about ninety miles. At the same time they thought they perceived in the western quarter some white mountains covered with snow, and directed their course towards them. On the 1st of July the atmosphere was cloudy, and at mid-day they imagined that they saw mountainous land; they were then in latitude 65° 13′ 30″, and longitude 31° 16′ W. of Paris. The fog was thick, but every now and then it cleared away, and they fancied they saw land; but on the air becoming quite clear they beheld nothing but masses of ice and some floating ice-bergs.

They entered a bay of ice on the 2d July; but

instead of land, they saw nothing but an immense and impenetrable extent of ice, in which rose enormous mountains of ice. The vapour and fog occasioned by the great extent of ice prevented them from seeing the coast, even if near it; but if the land here had been mountainous, they must have perceived its summits at a great distance across the ice, as from time to time the fog cleared away.

The extent of ice, which hitherto had lain in the direction of N.E. and S.W., in this bay took a turn to the W. and a little to the N., allowing the ships to hold a westerly course. On the 2d July, at mid-day, they were at least 160 miles from Snœfell Jokul, in latitude 65° 6′—longitude 32° 3′ W. of Paris, and, according to the old charts, they ought then to be very near Old Greenland. In going westerly they constantly observed towards the north a certain glimmering, *(ice blink,)* which is an indication of an uninterrupted track of ice, and which generally shews itself when at the distance of ten or twelve miles, and frequently at a much greater distance; but it is never observed where there are only patches of floating ice. The clouds assumed at times the appearance of land. On the 3d July, at mid-day, when at a distance of 270 miles from Snœfell Jokul, being in latitude 65° 11′, longitude 35° 8′, while surrounded with ice, they first discovered land. The variation of the compass was here 45° 10′. This land was composed of very high mountains towards the

north, appearing for two days always in the same position and of the same form; so that they were convinced of their not being clouds. They conjectured this land to be at the distance of fifty miles from them, or 290 miles nearly from Snœfell Jokul. The ice was every where so firmly united and of such vast extent, that they had not the least hope of breaking through it; and even if they could have entered it, their temerity would probably have been repaid by their ships being crushed in pieces between the mountains of ice. Every moment they became more and more surrounded with ice-bergs; and in this situation they discovered an enormous log of wood, which had been hewn square, and so large that it could not be taken on board until it had been cut in two with the saw. Several sea-gulls were perched upon this log. The most remarkable circumstance was that of its being mahogany, which is generally too heavy to float in the water; but the wood was so worm-eaten, even to the very heart, that Mr. Lowenorn conjectured its specific gravity probably might have been diminished. They saw no seals, nor any other sea-animals, in this part of the ocean, excepting a few gulls.

As the great mass of ice was observed to be drifting towards the S.W., they determined not to penetrate farther to the westward; for should they even discover some inlet in the ice through which they might pass, they would at most have been able to enter some bay beyond the ice, and

would have been obliged to pass the winter in Greenland, for which they were not at all prepared. Besides, they hoped to find less ice towards the north, and that they might perhaps discover some land in the neighbourhood of the bay of ice in which they had been on the 2d July. On the 7th, in latitude 65° 21′, longitude 30° 30′, at 120 miles from Snœfell Jokul, they fancied again that they saw an extended ridge of rocks, but it proved only a chain of ice-mountains; at the same time, towards the west, they discerned the *ice blink*, nearly in the same place where they were on the 2d July. On the 8th, proceeding easterly, they constantly observed, in a northerly direction, mountains of ice and the ice-blink, and passed between some floating islands of ice. Fearful that the masses of ice still coming down from the northward might fill up the whole of the sea between Greenland and Iceland, so that it could not be navigated, they preferred returning to Iceland, from which they were then only about sixty miles, and to make another attempt to discover the east coast of Greenland when the northerly winds and the current should have drifted the ice to the southward. Accordingly on the 12th June they entered the port of Dyrefjord.

All the accounts they received here confirmed them in the opinion that there was more ice than usual this year, and that it would not float away

at all that season, or at least till very late. Mr. Lowenorn, however, resolved to set sail once more, to be convinced of the impractibility of penetrating through the ice. He departed on the 23d July, and on the 24th, in latitude 66° 35′, longitude 29° 10′, fell in with great masses of ice. They persevered in coasting along these ice-bergs, which, in latitude 65° 10′, longitude 29°, appeared to turn towards the S.W. and to form a great bay; but that they might not be closed in by the ice, they stood to the southward, and then returned to latitude 65° 41′, to the place nearly where they were on the 8th. They now once more tried to proceed westerly, but were stopped by great masses of ice; and as for several days they saw nothing but masses of ice on all sides, they resolved to return to Iceland, where they arrived, at Havnefiord, on the 31st July. They now began to refit the small vessel under the command of Lieutenant Egede, which was to remain during the winter in Iceland, in order that she might resume the voyage of discovery in the following spring, and Mr. Lowenorn returned to Denmark with his ship.

Mr. Lowenorn is of opinion, that the eastern coast of Greenland may be approached, which however he thinks is by no means the part anciently inhabited and called East Greenland, and which has been lost for four centuries. He imagines that he can satisfactorily account for the vast masses

of ice which come down along that coast every year, by the formation of the globe. By the motion, he says, of the earth round its axis from west to east, supposing that the surface of the globe was nothing but water, the current of the sea must constantly be from east to west, and by reason of the centrifugal force, the waters must at the same time run towards the equator; but the various groups of continents and islands have modified these motions. The masses of ice round the north pole, and in the sea to the north of Asia, and around Spitzbergen, ought therefore by this rotation to take a direction from east to west, and also towards the Equator; and would consequently pass along the eastern coast of Greenland. Such is Admiral Lowenorn's theory; and such was that of Fabricius many years before Mr. Lowenorn's voyage. Sometimes, he tells us, these masses of ice break in the spring, on account of storms, winds, &c. and drift to the southward some months earlier, leaving the northern coast of Iceland open; but at other times the ice does not move, but renders that coast quite inaccessible. In order, then, to penetrate to the eastern coast of Greenland, a year, he thinks, ought to be chosen when the ice floats down in the early part of the season, intelligence of which can only be obtained in Iceland. The navigator should approach the coast in about the 66th parallel of latitude; and, by following the course of the floating ice, proceed as far as Cape Farewell. In the years 1751--53, an endeavour had been made with great

boats from Greenland to follow the east coast of Statenhoek or Cape Farewell to the north; but they had not been able to proceed farther than sixty miles on account of various obstacles.*

Lieutenant EGEDE, with his little vessel, set sail from the port of Havnefiord in Iceland on the 8th of August, 1786; met for many days enormous masses of floating ice, and discovered land on the 16th August, in latitude 65° 24′ 17″, longitude 33° 10′, at the distance of sixty or seventy miles; and approached it within thirty miles; he observed the current to run to the south-west. No soundings were to be had at 100 fathoms. There was a brightness in the horizon, occasioned no doubt by masses of ice. The ice was of great breadth between him and the land, but he could find no opening to push through it; he hove the lead in vain—no bottom was to be found. He perceived a narrow space of clear water lying between the ice and the land. The land was very high, with pointed rocky summits, apparently of greater elevation than the mountains of Norway; and they were covered with snow and ice; but through the telescope they could discover pointed peaks lower down, which were not covered with snow. On the 20th they again discovered land, when in latitude 64° 58′ 53″, longitude 34° 34′, at the distance of about six and thirty miles; but all the coast was beset with ice, which it was impossible to penetrate. They

* Abstracted from Admiral Lowenorn's MS. Journal.

could perceive a large bay or river which opened out to the northward, and ran in that direction into the country. They approached the land within ten miles. The bay, which might be four or five miles in breadth, was full of ice-islands. The land was very high, with pointed rocks covered with snow and ice. Through the telescope they perceived clefts in the rocks, and they thought they could see moss growing in some places. The coast trended in the direction of N.N.E. and S.S.W.; but Egede conjectures that at fifteen or sixteen miles more to the southward they might have seen Herjolfsnes, the bay belonging to which runs down as far as Statenhoek. There were numbers of seals on the ice-islands, gulls, and various species of sea-birds. Egede coasted on along the land towards the south, and though the air was very clear, they could perceive neither men, houses, nor animals, though they were sufficiently near the land to see them had there been any. On the 21st he still continued to see land; but the ice drove him from it, and in order that he might not be closed in, he thought it prudent to stand out into the open sea. The following day they had a terrible storm, by which the vessel was much damaged, and on the 22d September they regained the port of Havnefiord in Iceland, after being tossed about in all directions for some weeks.

Here Lieutenant Egede resolved to pass the

winter, in order to resume the object of the expedition in the following spring. Accordingly on the 6th of March, 1787, he again set sail, but fell in with nothing but immense masses of ice, floating about in all directions; and, the ship having sprung a leak, he was obliged to seek a port of Iceland, where he arrived on the 23d of April. Here he gained some intelligence concerning the ice, being informed that the quantity during the last two years had been greater than usual. He again set sail on the 8th of May with two small vessels, one of which was under the command of LIEUTENANT ROTHÉ. On the 17th May they came in sight of the land on the eastern coast of Greenland, being then in latitude 65° 15′ 58″, longitude 34° 47′. At the same time they were surrounded by ice-islands, and it was remarked that, on that and on the following day, the current ran from south northerly, which was the more extraordinary as it had been considered to run invariably in the contrary direction. But they were then in a large bay formed by the ice, which extended to the distance of thirty miles or more from the shore, without the smallest opening. In short, Egede observes that he had never before met with so much ice. He entered this bay of ice, which was at least forty miles in depth. On the 18th he approached the ice as close as was possible in order to get a near view of the coast. He was then about thirty miles from

the nearest land, and forty miles from the most northern part of it, the latitude being 65° 54′ 18″, longitude 36° 51′. The coast extended from N.N.E. to S.S.W. They saw nothing but rocks, very high, pointed, and in most parts covered with ice and snow, presenting a most dreary and miserable spectacle; and he observes, that if this part of the coast be inhabited, the people must acquire their means of sustenance in the interior of the country, by hunting and by fishing in the rivers, for he thinks they could not live on the sea-coast on account of the mountains of ice which surround it by land and by sea.

On the change of the current the ice began to come down afresh from the north, which forced them to leave the bay; a task they accomplished not without difficulty, and made sail for Iceland, where they arrived on the 28th May.

On the 8th June Lieutenant Egede set sail a second time; but meeting with nothing but mountains of ice, which it was impossible to pass, or to find any opening to admit the vessel towards the land beyond the ice, he put back into Iceland, after an unsuccessful attempt of three weeks. On the 14th July and 25th August he again made endeavours to pass through the ice, and to push on towards the coast of Greenland; but meeting continually with impenetrable ice, which prevented him even from seeing the land, he was at last forced to abandon the undertaking altogether, and

to return to Denmark. The two little vessels were so much damaged by the ice and the storms they met with, that they were every moment in danger of sinking.*

ALEXANDER MACKENZIE. 1789.

With the view of reaching the shores of the hyperborean sea, Mr. ALEXANDER MACKENZIE, accompanied by a party of Canadians and some Indians, one of which had been with Hearne, set out from Fort Chepewyan, on the south side of the Lake of the Hills, on the 3d June, 1789. On reaching the Slave Lake they found much ice, but were able to proceed, partly by land and partly by crossing the bays of the lake; they then descended the Mackenzie River, passed several tribes of Indians, and arrived finally at that which is called *Deguthee Dinees* or the *Quarrellers*, being the last inhabitants of Indians to the northward, and immediately bordering on the Esquimaux. From these Indians he learned that the distance over land, on the east side, to the sea, was not long, and to the westward still shorter; the intermediate land through which the river flowed projecting to a point into the sea. The banks of the river were now low, and displayed, on the 10th July, a face of solid ice, intermixed with veins of black earth; yet trees of spruce were growing

* From Admiral Lowenorn's MS. Journal.

of a large size. The latitude of the Quarrellers is about 67° 45′. On the 10th they passed three encampments of the Esquimaux. The river now began to widen fast, and to flow in a number of narrow meandering channels among low islands, on which were only observed a few dwarf willows.

On the 12th July they entered a lake, in latitude 69° 1′, open to the westward, in which, out of the channel of the river, there was not more than four feet water, and in some places the depth did not exceed one foot. They arrived at an island, the deepest water in the passage to it for fifteen miles not exceeding five feet. From a high part of this island they could see the solid ice extending from the south-west by compass to the eastward. In the south-west they could dimly perceive a chain of mountains, at the distance of more than twenty leagues, stretching farther to the north than the edge of the ice. To the eastward were observed many islands. Mr. Mackenzie says, "My people could not at this time refrain from expressions of real concern that they were obliged to return, without reaching the sea." Yet we are told that the people were obliged to remove the baggage on account of the rising of the water; that this rising they concluded to be the *tide;* and that it appeared to rise sixteen or eighteen inches: there were besides a great number of whales in the water, which, the guide informed them, were the same kind of fish which

constituted the principal food of the Esquimaux. On the island where they encamped, and which he called *Whale Island*, several red foxes were seen, one of which was killed. The latitude of Whale Island was 69° 14′ N. No natives appeared either on the shore of the continent or on the islands; but in various places were seen the remains of their habitations, their domestic utensils, frames of sledges and of canoes made of whalebone, which left no doubt on Mr. Mackenzie's mind that they were the deserted abodes of the Esquimaux.

If Hearne's account of his visits to the mouth of the Copper Mine River was unsatisfactory, that of Mackenzie to the mouth of that river which bears his name is still more so; for we are completely left in the dark, and almost without the smallest guide to form an opinion, whether the extensive but shallow water, in which Whale Island is situated, be the sea or a lake. He evidently means to impress the reader with an idea of its being the sea, but forbears even the mention of the word; yet the title of his book* implies, and on his chart it is asserted, that he had reached the "frozen ocean." It is observed by a writer in a popular critical journal,† that "the simple, easy, and obvious test of dipping his finger in the

* Voyage from Montreal through the continent of North America to the *Frozen* and Pacific Oceans.

† The Quarterly Review, No. XXXI. p. 167.

water to taste if it was *salt*, seems not to have "occurred" to the traveller; that "if he did so, he is uncandid in not mentioning the result:" and the conclusion drawn by the same writer, from all the circumstances mentioned by Hearne and Mackenzie, is, that both were certainly *near* the seashore, though neither of them actually reached it.

CHARLES DUNCAN. 1790, 1791.

The inland journey of Mr. Hearne had drawn the attention of Mr. Dalrymple to the consideration of the imperfect geography of the northern regions of America, and the lands around the north pole. In the course of his inquiries he was furnished with some charts made by the Indians, and other documents, from the Hudson's Bay Company, which led him to conclude that, notwithstanding the numerous failures in the search after a northern passage from the Atlantic to the Pacific, such a passage would ultimately be discovered round the north-eastern extremity of America, and that the surest way to it was up the Welcome. But as the naval administration of that day entertained less sanguine views on the subject, and as Mr. Dalrymple had experienced the truth of Dr. Douglas's observation, that "the Governor and Committee of the Hudson's Bay Company had made amends for the narrow preju-

dices of their predecessors, and that no further obstruction would be thrown in the way of those who might be sent on discovery," he addressed himself to the Governor of that Company, and prevailed on him to employ MR. CHARLES DUNCAN, a Master in the navy, (now Master-attendant of His Majesty's dock-yard at Chatham,) who had shewn considerable talent on a voyage to Nootka Sound.

Mr. Duncan was no less sanguine of success than Mr. Dalrymple. In 1790 he left England in one of the Company's ships called the *Sea-horse*, to take the command of a sloop named the *Churchill*, then in Hudson's Bay, and destined for the discovery. He found, on his arrival, a crew who affected to be terrified at the idea of proceeding to the northward on discovery. The Company's servants endeavoured to persuade him that the vessel was totally unfit for such a purpose, and told him, that there were no means in that country to make her sea-worthy—though Mr. Duncan has since learned that this same vessel was constantly employed for twenty years afterwards. Finding that every impediment was thrown in his way, and nothing likely to be done that season, he returned to England, resolving to have nothing further to do with the servants of the Hudson's Bay Company. However, on his arrival in England the Governors expressed so much regret and disappointment, and Mr. Dal-

ymple was so urgent for following up the discovery, that he was prevailed on to take the command of a strong well-built ship of eighty-four tons, called the *Beaver*, fitted to his mind, and stored with eighteen months' provisions. He left the Thames on the 2d May, 1791, met with much ice on entering Hudson's Strait, and was so hampered with it among the straits and islands, that he did not reach the height of Charles's Island, which is only in latitude 63°, till the 2d August; and on the 5th September entered Churchill River, when all hope of being able to accomplish any thing for that year was at an end. It has been observed, as something very remarkable, "that our early adventurers, at a time when the art of navigation was in its infancy, the science but little understood, the instruments few and imperfect, in barks of twenty-five or thirty tons burden, ill-constructed, ill-found, and apparently ill-suited to brave the mountains of ice between which they had to force their way, and the dark and dismal storms which beset them—that these men should have succeeded in running through the straits to high latitudes, and home again, in less time than Mr. Duncan required to reach one of the Hudson's Bay Company's establishments, the route to which was then as well known as that to the Shetland Islands."* Mr. Duncan's delay was

* Quarterly Review, No. XXXI, p. 166.

evidently occasioned by his great predilection for keeping near the land.

Mr. Duncan remained the winter in Churchill River, which he did not leave till the 15th July following; he then entered Chesterfield Inlet, and returned to Churchill about the end of August; his crew, as he states in his journal, having mutinied, who were encouraged by his first officer, a servant of the Hudson's Bay Company. The mortification he suffered at the failure, and the grief and vexation occasioned by his turbulent crew, had such an effect on his mind, that a violent fever was the consequence; and the voyage proved completely abortive. Thus terminated the last, and, it may also be said, the least efficient of all the expeditions (that of Gibbons perhaps excepted) for the discovery of the north-west passage.*

* MS. Journal of Mr. Duncan.

DISCOVERIES MADE BY THE RUSSIANS ON THE NORTHERN COAST OF SIBERIA DURING THE EIGHTEENTH CENTURY.

THE various voyages and partial discoveries of the Russians, along the shores of that widely extended empire, would scarcely admit of being brought separately into the chronological arrangement; but they have been collected and arranged with precision and ability by Mr. Coxe, in his interesting "Account of Russian Discoveries." The only part of them, which is here intended to be noticed, is that which relates to their several attempts to open a navigation between the White Sea and the Pacific, through the Northern or Tartarian Sea. The discovery and possession of Kamtschatka made such a communication the more desirable, and induced the Emperor Peter the Great to form a plan of discovery, the chief object of which was to ascertain "the separation, contiguity, or connection of Asia and America." For this purpose, he drew up with his own hand a minute of instructions, which, after his death, were immediately carried into execution by the Empress Catherine, who dispatched BEHRING, in 1728, from

Kamtschatka, in a vessel called the *Fortune*, manned with a crew of forty men and two lieutenants on this service. On the 10th August he fell in with the Island of St. Laurence, and continuing his course northerly till the 15th of the same month, found himself in latitude 67° 18′; and seeing no land either to the northward or the eastward, and the Asiatic continent trending to the westward, he conceived that he had fully established the fact of the separation of Asia and America, and had consequently executed his instructions; he thought it therefore prudent, at this advanced season of the year, to return to Kamtschatka.

The next point was to establish the fact, whether a practicable navigation existed between the White Sea and the sea of Kamtschatka. For this purpose various expeditions were undertaken, but none of them succeeded in performing the whole voyage, either at once or in successive trials; nor indeed is it quite clear that the whole navigation has ever been accomplished by different persons at different times, though the whole has unquestionably been done, with the exception of one "sacred promontory," between *Yenisei* and the *Lena*, called *Cape Severo Vostochnoi* or *North-East Cape*.

The first attempt from Archangel was in 1734, when Lieutenant Morovior set sail for the Obe, but he reached no farther that year than the mouth of the Petchora. The following summer

He passed through the strait of Waigatz into the sea of Kara, along the western coast of which he navigated as high as latitude 72° 30′, but did not succeed in doubling the Cape Olenei, which separates Kara from these a of Obe. But in 1738 Lieutenants MALGYN and SKURAKOF doubled that promontory, though not without great difficulty, and entered the bay of Obe. In the same year, two vessels under the Lieutenants OFFZIN and KOSKELEF passed round *Cape Matzol*, from the Bay of Obe to the mouth of the Yenisei, which had been frequently attempted without success; and in that year also the pilot, FEODOR MENIN, sailed from the mouth of the Yenisei towards the Lena, but being stopped by the ice at the mouth of the *Piasida* or *Piacini*, through which he was unable to find a passage, he returned to the Yenisei.

Lieutenant PRONTSHISTSHEF had attempted, in the year 1735, to proceed the contrary way from the Lena to the Yenisei. He found great difficulty in passing through the archipelago of islands lying at the mouth of the Lena, on account of the ice. Proceeding to the north-west, he observed many ice-islands, from twenty-four to sixty feet in height. He passed through narrow channels between fields of ice, and damaged his vessel so much, that on the 2d September he was compelled to seek shelter in the mouth of the *Olenek* or *Olensk*, where he passed the winter. He again

set sail, on the 1st August, and in three days reached the mouth of the *Anabara*, in latitude 73°, proceeded on his voyage on the 10th, passed through much ice, and was obliged to take shelter at the mouth of the *Katanga*, in latitude 75° nearly. Continuing along the shore to the northward, he reached *Taimura* on the 18th: a chain of islands stretching to the northward prevented his further progress, and with much difficulty he returned to the Olenek, which he reached on the 29th August. If this account given by Gmelin were correct, the promontory between the Katanga and the Taimura would have been doubled, and the difficulty surmounted. Muller, according to Coxe, says, that Prontshistshef did not quite reach the mouth of the Taimura; and that he was stopped by a chain of islands stretching from the continent far to the northward, the channels between which were choked with ice; and that, having worked among them as high as latitude 77° 25′, and seeing no prospect of forcing a passage, he returned to the Olenek.

The Russians, from Archangel and other ports, make annual voyages to the western coast of Nova Zembla for the purpose of catching seals, bears and sea-horses, but it does not appear that any vessel, excepting that of William Barentz, the Dutchman, ever passed the northern extremity to the eastern coast.

From the Lena eastward to the *Kovyma*, the

passage is less difficult, and has frequently been performed; but it is not pretended that the voyage from the Kovyma round *Tschuktskoi Noss* has been accomplished more than once, and that was by a Cossack of the name of DESHNEFF, as far back as the year 1648. The account of this curious voyage was discovered in the records of Yakutsk, in 1736, and, together with that of some other navigations in the frozen ocean, published by Muller. Its authenticity appears to have been established by Behring and Cook, who found the description of the north-eastern coast of Asia, the opposite islands, and the people, to accord exactly with that which is given in Deshneff's narrative. It is however a remarkable circumstance, that none of the various attempts to pass *Shelatskoi Noss*, the point which forms the north-eastern extremity of Asia, have succeeded since the time of Deshneff. The most persevering were those made by SHALAUROF, a merchant of Yakutsk, who, having built a ship at his own expense, descended the Lena in 1761, but found so much ice in the month of July that he was obliged to take refuge in the Yana, where he was detained by the ice till the 29th August. From hence he coasted to the eastward, doubled Swaitoi Noss, or the "sacred promontory," on the 6th September, and discovered land to the northward in the frozen ocean, which was afterwards visited by some Russian officers, and found to be five uninhabited islands,

to which they gave the name of *Bear Islands*. Having passed between those islands and the main, and the season being far advanced, Shalaurof ran his vessel into one of the mouths of the Kovyma, where he wintered, and procured great plenty of wild rein-deer, salmon and trout.

The mouth of the Kovyma was not free from ice before the 21st July, 1762, when Shalaurof again put to sea, and stood to the eastward. He soon found that he had not only much ice to contend with, but also a current setting to the westward. On the 19th August the ship was near the shore, surrounded and hemmed in by islands of ice. He endeavoured for several days to regain the open sea, which was observed to be much less clogged with ice, but was forced down towards the coast by large floating masses setting in that direction. He succeeded, however, in getting clear of it, and again stood to the N. E. in order to double Shelatskoi Noss, the latitude of which is about 71°, but contrary winds and the lateness of the season obliged him to search for some place to pass the winter in. He accordingly stood to the southward into a deep bay on the western side of Shelatskoi Noss, near the island of *Sabedei*, where he observed some huts of the Tschutski, but the inhabitants fled on his approach.

Finding no place here proper for his purpose, he again stood out to sea on the 8th September; and,

having fastened his vessel to a large mass of ice, was drifted along with it to the W.S.W. at the rate of five versts an hour; on the 12th he came to his former wintering place in the Kovyma, intending to make another attempt the following year to double Shelatskoi Noss; but want of provisions and the mutiny of the crew forced him to return to the Lena.

The difficulties he had met with did not however intimidate Shalaurof from making another attempt to double Shelatskoi Noss, which he by no means considered as impracticable; and for this purpose he left the Lena, in the same vessel, in the year 1764, but neither he nor any of his crew ever returned. They are supposed to have been put to death by the Tschutski, near the *Anadyr*, the third year after their departure from the Lena; but whether he had succeeded in doubling the north-east promontory and passed through Behring's Strait to the Anadyr, or crossed the narrow neck of land which separates the Anadyr from the Kovyma, has not been ascertained; all that is known being the certainty of their having perished in that neighbourhood. Mr. Sauer learned from Dauerkin, the Tschutski interpreter, that Shalaurof's vessel had been found drifting near the mouth of the Kovyma, and himself and his crew frozen to death in a tent; but he doubted the truth of the story.

In all the Russian attempts to pass from Arch-

angel, and the more eastern ports, into the Pacific; it cannot fail to strike the reader that every where along this low coast and shallow sea the vessels had to struggle continually with ice, and that in their endeavours to double the projecting points of land, they constantly kept close to the shore, instead of standing out into deep water, where, in all probability, they would have met with less ice.*

* Coxe's Account of the Russian Discoveries.

CHAPTER V.

VOYAGES OF NORTHERN DISCOVERY UNDERTAKEN IN THE EARLY PART OF THE NINETEENTH CENTURY.

Lieutenant Kotzebue—John Ross, David Buchan, William Edward Parry, and John Franklin.

LIEUTENANT KOTZEBUE. 1815 *to* 1818.

THE long protracted war, in which all the nations of Europe were at different times involved, suspended all attempts at northern discovery; but no sooner did the European world begin to feel the blessings of peace, than the spirit of discovery revived. Expeditions were sent forth to every quarter of the globe; and, to the honour of an individual it ought to be mentioned that, at his own cost, a ship was fitted out for the purpose of ascertaining whether the sea, on the northern coast of America, afforded a navigable passage between the Pacific and Atlantic oceans: that individual is the Russian Count Romanzoff. The vessel

prepared for this undertaking was called the *Rurick*, and LIEUTENANT KOTZEBUE, son of the celebrated writer of that name, was appointed to command her. She was of small tonnage, not exceeding one hundred, and manned with twenty-two men, officers included, a surgeon and botanist. His instructions were to proceed round Cape Horn, and make the best of his way to the north-west coast of America, pass Behring's Strait, and endeavour to find some bay or inlet on the American side to lay up his vessel in safety, while, with a certain number of his crew, he should penetrate the American continent by land, first to the northward, to ascertain if Icy Cape be an island, as is supposed, and then to the eastward, keeping the hyperborean sea on their left, and carrying with them light skin boats or *baidars* to enable them to pass such lakes or rivers as might intervene.

At one of the Aleutian Islands he observed a vast quantity of drift-wood thrown upon the shore, and, among other species of wood, picked up a log of the camphor tree. In the midst of Behring's Strait, between East Cape and Cape Prince of Wales, he found the current setting strongly to the north-east, at the rate, as he thought, of two miles and a half an hour, which is at least twice the velocity observed by Cook. In this particular place also the depth of the water was considerably more than the soundings mentioned in Cook's voyage.

Having passed the Cape Prince of Wales early in August, without any obstruction from ice, and as it would appear without seeing any, an opening was observed in the line of the American coast, in latitude about 67½° to 68°. Into this inlet the Rurick entered. Across the mouth was a small island, the shores of which were covered with drift-wood; and among it were observed trees of an enormous size. The tide regularly ebbed and flowed through the passages on each side of the island. Within the entrance, the great bay or inlet spread out to the north and south, and had several coves or sounds on each shore. Its extent to the eastward was not determined, but the Rurick proceeded as far in that direction as the meridian of 160°, which corresponds with that of the bottom of Norton Sound.

The shores of this great inlet, and more particularly the northern one, were well peopled with Indians of a large size; the men were well armed with bows, arrows, and spears. They wore skin clothing, and leather boots, neatly made and ornamented; their huts were comfortable and sunk deep into the earth; their furniture and implements neatly made; they had sledges drawn apparently by dogs, though the skulls and skins of rein-deer indicated the presence of that animal in the country. The description given by Lieutenant Kotzebue of these people corresponds almost exactly with that of the Tschutski by Cook on the

opposite continent, with whom they sometimes trade and are sometimes at war. They are the same race of people as those on the continent of America lower down and about the Russian settlement of Kodiack, as appeared from a native of that place being able to understand their language.

From these Indians Lieutenant Kotzebue learned, that, at the bottom of the inlet was a strait through which there was a passage into the great sea, and that it required nine days rowing with one of their boats to reach this sea. This, Kotzebue thinks, must be the Great Northern Ocean, and that the whole of the land to the northward of the inlet must either be an island or an archipelago of islands.

At the bottom of a cove on the northern shore of the inlet was an extensive perpendicular cliff, apparently of chalk, of the height of six or seven hundred feet, the summit of which was entirely covered with vegetation; between the foot of this cliff and the shore was a slip of land, in width about five or six hundred yards, covered also with plants, which were afterwards found to be of the same kind as those on the summit. But the astonishment of the travellers may readily be conceived, when they discovered, on their approach to this extensive cliff, that it was actually a mountain of solid ice, down the sides of which the water was trickling by the heat of the sun. At the foot of the cliff several elephants' teeth were picked up, similar to those which have been found in such immense quantities in Siberia and the islands of

the Tartarian Sea;* these teeth they concluded to have fallen out of the mass of ice as its surface melted, though no other part of the animal was discovered by them. There was, however, a most oppressive and offensive smell of animal matter, not unlike that of burnt bones, so that it was almost impossible to remain near those parts of the face of the mountain where the water was trickling down. By the gradual slope of the side of this enormous ice-berg which faced the interior they were able to ascend to its summit, and to make a collection of the plants that were growing upon it. The stratum of soil which covered it was not deep, and the Lieutenant describes it as being of a calcareous nature. The slip of land at the foot of the mountain was probably formed of the soil and plants which had fallen down from the summit as the ice melted, and which, in fact, while there, they had the opportunity of observing to fall.

Besides this mountain of ice, there was no appearance of ice or snow on the land or the water in this part of America, and the weather was exceedingly clear and mild, and even warm; but on the opposite coast of Asia the weather at the same time was cold, and the atmosphere almost constantly loaded with fogs. There was in fact

* Lieutenant Kotzebue called them mammoths' teeth (mastodontes); but from a drawing made by the naturalist they were evidently the teeth of elephants: which is the more extraordinary, as being the first remains of this quadruped found in the New world.

such a great difference between the temperature of the two continents, on the two sides of the strait, that, in standing across, it was like passing instantaneously from summer to winter, and the contrary. This happened about the end of August, at which time a fair and open passage appeared to lie on the American side, as far to the northward as the eye could reach; whereas on the Asiatic side the ice seemed to be fixed to the shore, and its outer edge to extend in the direction of north-east, which was precisely that of the current.

The season being too far advanced either to attempt to carry the Rurick round Icy Cape, which, however, Lieutenant Kotzebue thinks he could have done without any obstruction, or to prosecute the land journey to the eastward; and fearing if he remained longer in the great inlet the entrance might be closed up with ice, he thought the most prudent step he could take would be that of proceeding to winter and refit in California, and early in the following spring to renew the attempt to penetrate into the interior of America. He accordingly set out again early in March, called at the Sandwich Islands, and reached the Aleutian Islands in June, where the Rurick suffered much from a violent gale of wind, in which Lieutenant Kotzebue unfortunately had his breast bone broken; this accident threw him into such a state of ill health, that after persevering till they reached Eivoogiena or Clerke's Island, at the mouth of

Behring's Strait, the surgeon declared that nothing but a warmer climate would save his life. The ice had but just left the southern shores of this island and was gradually moving to the northward, which it appears is its usual course every year, but is hastened or delayed in its progress more or less according to the prevailing winds and the strength with which they blow. Being thus nearly a month too soon to afford any prospect of immediate access to the inlet on the northern side of Cape Prince of Wales, and his health daily getting worse, he was reluctantly compelled to return with his little bark, and to make the best of his way home round the Cape of Good Hope.

In the course of his circumnavigation, Lieutenant Kotzebue has made several interesting discoveries of new groups of islands in the Pacific; and he has done that which for the first time has been effected, namely, taking the temperature of the sea at the surface and at a certain depth at a particular hour every day, both on the outward and homeward voyage.

It is greatly to the credit of Lieutenant Kotzebue that, after a voyage of three years, in every variety of climate, he has brought back again every man of his little crew, with the exception of one who embarked in a sickly state.*

* From personal conversation with Lieutenant Kotzebue.

JOHN ROSS, DAVID BUCHAN, WILLIAM EDWARD PARRY AND JOHN FRANKLIN. 1818.

In the whole series of expeditions for the discovery of a northern communication between the Atlantic and Pacific Oceans, none have been fitted out on so extensive a scale, or so completely equipped in every respect, as the two which left England this present year. From the numerous attempts that have been made from the earliest periods of British navigation to the end of the eighteenth century, it is sufficiently evident that the discovery of a north-west passage to India and China has always been considered as an object peculiarly British. It engaged the attention and procured the encouragement of the first literary characters of the age, and the most respectable of the mercantile class. It has received the patronage of sovereigns, and the promise of rewards from different parliaments. It never failed to excite a most lively interest among all conditions of men. The principal maritime nations of Europe have at different times been engaged in the same enterprize; and even Russia, as we have seen, nay, a private individual of Russia, has recently fitted out a ship at his own cost, for the discovery of a communication between the two oceans by a passage round North America.

It would therefore have been something worse

than indifference, if, in a reign which stands proudly pre-eminent for the spirit in which voyages of discovery have been conducted, England had quietly looked on, and suffered another nation to accomplish almost the only interesting discovery that remains to be made in geography, and one to which her old navigators were the first to open the way.

A circumstance occurred which encouraged the fitting out an expedition of discovery at this particular time. For the last three years, very unusual quantities of the polar ice had been observed to float down into the Atlantic; and in the year 1817 the eastern coast of Greenland, which is supposed to have been shut up with ice for four centuries, was found to be accessible from the 70th to the 80th degree of latitude, and the intermediate sea between it and Spitzbergen entirely open in the latter parallel.* This disappearance of the arctic ice from a very considerable extent of the Greenland seas was deemed to be favourable for making a new experiment, and to hold out the hope of a successful issue; particularly in the attempt to approach the north pole, which, notwithstanding the failure of the late Lord Mulgrave, is considered by many as being by no means a hopeless enterprize. The opinion of the learned, and the experience of the whale-fishers, have long been in favour of an open polar sea, and of the practicabi-

* A Hamburgh ship actually sailed along this track.

lity of reaching this northern extremity of the earth's axis: it was resolved, therefore, to fit out two distinct expeditions; the one to proceed up the middle of Davis's Strait to a high northern latitude and then to stretch across to the westward, in the hope of being able to pass the northern extremity of America, and reach Behring's Strait by that route; the other to proceed directly north, between Greenland and Spitzbergen, and in the event of meeting with an open polar sea, free from land, in which case it was hoped it would also be free from ice, to proceed direct for Behring's Strait, by which route the distance would be shorter than the other by nearly one-third.

The ships fitted out for exploring the north-west passage were the *Isabella*, of 382 tons, commanded by Captain JOHN ROSS, and the *Alexander*, of 252 tons, under the orders of Lieutenant WILLIAM EDWARD PARRY. Those destined for the polar passage were the *Dorothea*, of 370 tons, commanded by Captain DAVID BUCHAN, and the *Trent*, of 250 tons, under the command of Lieutenant JOHN FRANKLIN; to each ship there was also appointed an additional Lieutenant and two master's mates or midshipmen. Two of these Lieutenants are the sons of two eminent artists, one of the late Mr. Hoppner and the other of Sir William Beechey, and both of them excellent draughtsmen.

The four ships were all fitted out as strong as wood and iron could make them, and every regard paid in the internal arrangement to the comfort

and accommodation of the officers and crews. They were stored with provisions and fuel for two years; supplied with additional quantities of fresh preserved meats, tea, sugar, sago, and other articles of a similar kind. Each of the larger ships had a surgeon and a surgeon's assistant, and the two smaller vessels an assistant surgeon each. A master and a mate accustomed to the Greenland fishery were engaged for each ship, to act as pilots when they should meet with ice. The whole complement of men, including officers, seamen, and marines in each of the larger ships was fifty-six, and in the smaller forty. Captain Sabine, of the Royal Artillery, an officer well versed in mathematics and astronomy and in the practical use of instruments, was recommended by the President and Council of the Royal Society, and in consequence thereof engaged, to proceed with the north-west expedition; and Mr. Fisher, of the University of Cambridge, a gentleman well versed in mathematics and various branches of natural knowledge, to accompany the polar one. A number of new and valuable instruments were prepared for making observations in all the departments of science, and for conducting philosophical experiments and investigations; in order that, in the event of the main object of the voyage being defeated either through accident or from utter impracticability, every possible attention might be paid to the advancement of science, and correct

information obtained on every interesting subject in high northern latitudes which are rarely visited by scientific men.

Among other important objects, which the occasion will present, is that of determining the length of the pendulum vibrating seconds in a high degree of latitude. For this purpose each expedition is supplied with a clock having a pendulum cast in one solid mass, vibrating on a blunt knife-edge resting in longitudinal sections of hollow cylinders of agate; and to each clock is added a transit instrument. Each ship is also supplied with the following instruments—a dipping needle on a new construction which, at the same time, is calculated to measure the magnetic force—an azimuth compass improved by Captain Kater—a repeating circle for taking terrestrial angles—an instrument for ascertaining the altitude of celestial bodies when the horizon is obscured by fogs, which is almost always the case in high latitudes—a dip-micrometer and dip-sector, invented by Doctor Wollaston, to correct the variation of the real dip from that given in the tables, arising principally from the difference between the temperature of the sea and the atmosphere—a macrometer, also invented by Doctor Wollaston, for measuring directly the distance of inaccessible objects, by means of two reflectors, mounted as in a common sextant, but at a greater distance from each other —three chronometers to each ship—a hydrometer,

intended to determine the specific gravity of sea-water in different latitudes—thermometers of various kinds—a barometer of Sir Henry Englefield's construction for ascertaining the height of objects. Besides these, each expedition is furnished with an apparatus for trying the state of atmospherical electricity, and determining whether there be any thing peculiar in the electricity of the atmosphere in the polar regions; and whether there be any analogy between the aurora borealis and the electrical light—an apparatus for taking up sea-water from given depths; and an apparatus for the analysis of air, which is the more desirable from there being little or no change from vegetable or animal life or decomposition in the polar atmosphere; and consequently a different proportion of oxygen, azote or carbonic acid, may be expected from that which prevails under ordinary circumstances.

Each expedition is besides provided with a complete apparatus for collecting, in the sea and on the land, the various objects of natural history which may occur, and for preserving them in a proper state; and of such as cannot be preserved, accurate drawings will be made by Lieutenants Hoppner and Beechy. On the whole, neither care nor expense appears to have been spared in sending out the two expeditions as complete and as well equipped as possible, and nothing that the commanders of them deemed to be useful was refused.

Every suggestion that appeared to merit consideration was attended to, both in the equipment of the ships and in the instructions to the officers, every one of whom, from the highest to the lowest, left this country in perfect satisfaction, and in full confidence of attaining the great object of the expeditions—or at least with the determination of establishing the fact of its utter impracticability.

The failure of so many expeditions, of which an abstract has been given in the preceding pages, is certainly rather of a discouraging nature; and after so many unsuccessful trials for the discovery of a passage between the Atlantic and the Pacific oceans by the north-east, the north, and the north-west, it would not seem unreasonable to infer that no such passage exists, and that therefore the two last expeditions might have been spared—but the same inference might with equal fairness have been drawn after the first three or four attempts. The progressive geography of the northern regions was very slow; but it *has been* progressive: yet much within the limits of practical navigation still remains unexplored.

Of the three directions in which a passage has been sought for, from the Atlantic to the Pacific, that by the north-east holds out the least encouraging hope; indeed the various unsuccessful

attempts by the English and the Dutch on the one side, and by the Russians on the other, go far to prove the utter impracticability of a navigable passage round the northern extremity of Asia; though the whole of this coast, with the exception, perhaps, of a single point, has been navigated in several detached parts and at different times.

But the question of a north-west passage, which would be much shorter, and of a polar one, which would be the shortest of all, rests on very different grounds. That the north pole may be approached by sea, has been an opinion entertained both by experienced navigators and by men eminent for their learning and science; that several ships have at different times been carried three or four degrees beyond Spitzbergen and the usual limits of the whale fishery, is not merely a matter of opinion; and if the polar sea be navigable to the height of 84°, there seems to be no other physical obstruction, than the intervention of land, to the practical navigation of that sea to the north pole itself; as there is no reason to suppose that the temperature of that point is lower in the winter, while it is probably much higher in the summer, than on the parallel of 80°; as it is well known that the latitude of 80° is generally not colder on the same meridian, and in many places much less severe, than that of 70° is in others. The Russians pass the winter very well on Spitzbergen, but they have not ventured to winter

on Nova Zembla many degrees to the southward of it. Deer live and thrive in 80° latitude on Spitzbergen, but cannot live in 75° on Nova Zembla. Neither does the quantity of ice, whether formed on the surface of the main ocean, or floated out of the bays and rivers and from the coasts, depend on the degree of latitude where it is found. Ships, for instance, navigate freely every year round the North Cape in the parallel of 72° or 73°, and proceed along the coast of Spitzbergen without impediment from ice as high up as 80°, while on the opposite coast of America the sea is not navigable at all for a great part of the year from 45° upwards; and the parallel of 66° forms at present the utmost limits of northern navigation on that coast.

It is a well established fact that the cold is much more intense on the eastern than on the western coasts of continents and islands. Iceland furnishes a curious instance of this fact; the whole eastern coast being a series of mountains covered with ice and snow, and immense glaciers, moving downwards to the very sea; while the mountains and the fiords or firths on the western side are generally, if not always, free from ice;—but what is still more extraordinary, the opposite coast of Greenland in the same parallel of latitude and four degrees to the southward of it, and at the short distance of one hundred and fifty miles, is guarded from all approach by a perpetual and interminable barrier of ice.

In fact the ice-bergs and those vast fields of ice which float about on the sea, and are wafted down by currents into the Atlantic, are chiefly formed on coasts and in bays, in narrow straits and at the mouths of great rivers. The whole coast of Siberia is a fertile source of this supply. The multitude of large rivers which fall into the polar sea, by carrying down alluvial earth, have formed numerous expansive and shallow bays of fresh water, which, in the course of the winter, become so many solid masses of ice. As the sources of these rivers and a great part of their course are in more southern latitudes, where they never freeze, the water they supply is, in the winter, dammed up near the mouth, and ice-bergs are formed, which, when broken loose, are drifted out to sea. In the same manner the field ice is formed in the straits and bays and on shallow coasts, which, when set afloat in the spring, is carried out into the sea; in this situation it is drifted about till heaped piece on piece, and driven about, it again fixes itself among archipelagos of islands, on shallow coasts, and in straits, bays and inlets, where each field becomes a nucleus for an increased accumulation—as in the straits of Bellisle and Behring, for instance, and in every part of Hudson's Bay, down to the latitude of 50°. One vast chain of field ice is usually found wedged in between the eastern coast of Greenland and Spitzbergen, in the direction of north-east and south-west, which, as the summer ad-

vances, and particularly when the wind blows from the northward, opens in various places; and when ships have passed through these openings to the northward they have generally found the sea clear of ice.

If therefore the great polar basin should be free of land, the probability is, that it will also be free of ice. It was the opinion of Frobisher, Davis, and most of the old and experienced navigators, that the deep blue sea does not freeze. This would be to assume too much, as its surface has frequently been observed to freeze when not agitated by the wind; but it may be doubted whether a deep and extensive sea can be permanently shut up with ice. The almost perpetual agitation of the surface, and the increased temperature of the water at great depths, and consequently its diminished specific gravity, which will cause it to ascend, will probably prevent those immense fields and masses of ice from forming, which are met with near the land even in very low latitudes. It was, at any rate, desirable to ascertain how the fact stood in this respect, and whether it was practicable to reach the north pole,—in which case, there was no reason to doubt that it would also be practicable to proceed by that nearest route to Behring's Strait. The only expedition which had hitherto been sent out for the express purpose of advancing towards the north pole, was that under the command of Cap-

tain Phipps; but the two vessels employed on this service having unfortunately got hampered and entangled in the shallow sea and among the islands on the northern and north-eastern side of Spitzbergen, at an advanced period of the season, it returned without making any discovery.

The case is different with regard to the north-west passage. From the very frequent attempts which have been made for its discovery, it is now known pretty nearly whereabouts such a passage, if it exists at all, must be looked for. It has, for instance, been ascertained, that there is no passage on the coast of America below the arctic circle; but beyond this it has not been ascertained whether this coast rounds off to the eastward in a continuous line into Old Greenland, forming what is named Baffin's Bay on the charts, or whether it does not turn in a contrary direction to the westward, and fall in with the general trending of the northern coast of America; which, from three nearly equidistant points, seen by Cook, Mackenzie and Hearne, may be considered to run within a degree either way of the 70th parallel of latitude.

Many reasons have been assigned for the latter supposition. The constant current that descends down the Welcome on the one side, and towards the coast of Greenland on the other; the logs of mahogany and the remains of the North American ox brought from the north-west by that

current; the ice-bergs that come floating down from the northward; and the whale struck in the sea of Spitzbergen and taken the same year in Davis's Strait;* these and the rude charts painted on skins by the Indians, which, though without scale or compass, mark the inlets from Hudson's Bay with tolerable accuracy, and carry the coast without interruption to the Coppermine River,† are strong arguments in favour of a north-western communication between the Atlantic and the Pacific.

Indeed the best geographers are now of opinion that Greenland is either an island or an archipelago of islands; and this is no new idea. Among the Burleigh Papers,‡ in the British Museum, is one on the subject of a north-west passage to Cathaia in his lordship's own hand-writing, which begins thus:—"Considering Groynelande is well known to be an islande, and that it is not conjoyned to America in any part; that there is no cause of doubte but that upon the north of Baccalaos the seas are open," &c.

This supposed insularity of Greenland will most probably be determined by one or other of the expeditions. If in the affirmative, the next question

* Quarterly Review, No. XXXVI. Art. VIII.

† One of these charts is in the Hudson's Bay House.

‡ In the Lansdowne Collection, vol. c. Paper No. 4, endorsed Mr. Greynfeld's Voiadge, &c.

that presents itself is, whether an uninterrupted communication exists between the Pacific and the Atlantic. The simple fact of a perpetual current setting from the Pacific into Behring's Strait, and a perpetual current down the coasts of Greenland and Labrador into the Atlantic, renders such a communication extremely probable; and it becomes almost certain, when we find the productions of the shores of the Pacific carried to the northward by the first current, and brought down into the Atlantic by the second. The journals of Cook, Clerke, Glottof, and Kotzebue establish this fact. And as we know, from the Russian, the English and the Dutch navigators, that a westerly current sets along the coast of Siberia and Europe, from the Kovyma to the White Sea, it is probable that the water, in passing through Behring's Strait into the Polar Sea, diverges on each side, and that the other part of it, following the trending of the American coast, gives rise to the current down the Welcome, as observed by Button, Fox, Middleton and others.

It must be admitted, at the same time, that although a communication may, and in all probability does, exist between the two oceans, it by no means follows that there must also be found a navigable passage for large vessels; though it is not unfair to infer that, where large mountains of ice can float and find their way, a ship may do the

same. This, however, is the point to be ascertained by the expedition under Captain Ross. While this officer, with two vessels under his orders, is employed in examining the unexplored part of the east coast of America, to the northward of the arctic circle, and in endeavouring to pass along the northern shore of that continent to Behring's Strait, to Captain Buchan is assigned the task of inquiring into the state of the Polar Sea to the northward of Spitzbergen. Should both fail of success in the main objects of the expedition, from both may at least be confidently expected much valuable information, and improvement in the hydrography and the geography of the arctic regions; as well as many important and interesting observations on the atmospherical, magnetical, and electrical phenomena, which cannot fail to advance the science of meteorology; and lastly, many valuable collections of objects in natural history, which inhabit a part of the globe where few researches have yet been made in this branch of science. In short, from the zeal and abilities of the persons employed in the arduous enterprize, every thing may be expected to be done within the scope of possibility. Of the enterprize itself it may be truly characterized as one of the most liberal and disinterested that was ever undertaken, and every way worthy of a great, a prosperous and an enlightened nation;

having for its primary object that of the advancement of science, for its own sake, without any selfish or interested views. On this account it has justly excited the attention, and called forth the approbation, of maritime Europe; for it is well known that whatever new discoveries may be made, will be for the general benefit of mankind; and that if a practicable passage should be found to exist from the Northern Atlantic into the Northern Pacific, the maritime nations of Europe will equally partake of the advantages, without having incurred either the expense or the risk of exploring it.

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